Kamala D. Harris, State Bar No. 146672
Attorney General of California
Mark R. Beckington, State Bar No. 126009
Supervising Deputy Attorney General
Susan K. Smith, State Bar No. 231575
Deputy Attorney General
300 South Spring Street, Suite 1702
Los Angeles, CA 90013
Telephone: (213) 897-2105
Fax: (213) 897-1071
E-mail: Susan.Smith@doj.ca.gov
Attorneys for Attorney General Kamala D. Harris
and California Department of Food and Agriculture

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF CALIFORNIA

THE STATE OF MISSOURI, ex rel., Chris Koster, Attorney General; THE STATE OF NEBRASKA, ex rel. Jon Bruning, Attorney General; THE STATE OF OKLAHOMA, ex rel. E. Scott Pruitt, Attorney General; THE STATE OF ALABAMA, ex rel. Luther Strange, Attorney General; THE COMMONWEALTH OF KENTUCKY, ex rel. Jack Conway, Attorney General; and TERRY E. BRANSTAD, Governor of the State of Iowa,
v.

KAMALA D. HARRIS, solely in her official capacity as Attorney general of California; KAREN ROSS, solely in her official capacity as Secretary of the California Department of Food and Agriculture,

Defendants.

2:14-CV-00341-KJM-KJN

## REQUEST FOR JUDICIAL NOTICE IN SUPPORT OF DEFENDANTS' MOTION TO DISMISS

Date: $\quad$ June 6, 2014
Time: 10:00 a.m.
Courtroom: 3, $15^{\text {th }}$ Floor
Judge:

Pursuant to Federal Rule of Evidence 201, Defendants Attorney General Kamala D. Harris and Secretary of California Department of Food and Agriculture Karen Ross (collectively,
"Defendants") request that the Court take judicial notice of certain documents relevant to their motion to dismiss, true and correct copies of which are attached. The Court may take judicial notice of any fact that is "not subject to reasonable dispute because it (1) is generally known within the trial court's jurisdiction; or (2) can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b). A court shall take judicial notice if requested by a party and supplied with the necessary information. Fed. R. Evid. 201(c)(2); see United States v. Ritchie, 342 F.3d 903, 909 (9th Cir. 2003) ("Facts are indisputable, and thus subject to judicial notice, only if they are either 'generally known' . . . or 'capable of accurate and ready determination by resort to sources whose accuracy cannot be reasonably questioned . . . '"').

Defendants hereby request that the Court take judicial notice of the following documents: the legislative history of AB 1437 (Stats 2010 ch. 51) (attached as Exhibit A, RJN pp. 1-392). This document is properly subject to judicial notice as legislative history not reasonably subject to dispute. See Ass'n Des Eleveurs De Canards Et D'Oies Du Quebec v. Harris, 729 F.3d 937, 945 n. 2 (9th Cir. 2013) (taking judicial notice of legislative history of state statute).

Dated: April 9, 2014
Respectfully submitted,
Kamala D. Harris
Attorney General of California
Mark R. Beckington
Supervising Deputy Attorney General
/s/ Susan K. Smith
SUSAN K. Smith
Deputy Attorney General
Attorneys for Attorney General Kamala D. Harris and California Department of Food and Agriculture

# This legislative history contains the following items in the order listed: 

-- The Code Section of interest to the requestor
-- The Statute / Chaptered Version of the legislation
-- The Senate or Assembly Final History of the legislation
-- Versions of the legislative bill.

# This is the current code section 

 of interest.
# HEALTH AND SAFETY CODE 

## Annotated

OF THE STATE OF CALIFORNIA

Adopted April 7, 1939
with amendments through the 2011 Regular Session, First Extraordinary Session, and urgency legislation through Chapter 8 of the 2012 Regular Session of the 2011-2012 Legislature
§§ 25600 through 33490

Annotated and Indexed by The Publisher's Editorial Staff

## Former Sections:

Former H \& S C § 25994, similar to present H \& S C § 121850 , was added Stats 1969 ch 975 § 1 and repealed Stats 1995 ch 415 § 166.

Note-Proposition 2, effective November 5, 2008, provides:
SECTION 1. SHORT TITLE
This act shall be known and may be cited as the Prevention of Farm Animal Cruelty Act.

SEC. 2. PURPOSE
The purpose of this act is to prohibit the cruel confinement of farm animals in a manner that does not allow them to turn around freely, lie down, stand up, and fully extend their limbs.

## SEC. 4. SEVERABILITY

If any provision of this act, or the application thereof to any person or circumstances, is held invalid or unconstitutional, that invalidity or unconstitutionality shall not affect other provisions or applications of this act that can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.

SEC. 5. EFFECTIVE DATES
The provisions of Sections 25990, 25991, 25992, 25993, and 25994 shall become operative on January $1,2015$.

## § 25994.3. [Section repealed 1996.]

Added Stats 1969 ch 975 § 1. Repealed Stats 1995 ch 415 § 166 (SB 1360). See H \& S C § 121855.

## § 25994.5. [Section repealed 1996.]

Added Stats 1969 ch 975 § 1. Repealed Stats 1995 ch 415 § 166 (SB 1360). See H \& S C § 121860.

## § 25994.7. [Section repealed 1996.]

Added Stats 1969 ch 975 § 1. Repealed Stats 1995 ch 415 § 166 (SB 1360). See H \& S C § 121865.

## § 25994.8. [Section repealed 1996.]

Added Stats 1969 ch 975 § 1. Repealed Stats 1995 ch 415 § 166 (SB 1360). See H \& S C § 121870.

## CHAPTER 14

## Shelled Eggs

[Added Stats 2010 ch $51 \S$ 1, effective January 1, 2011. Former Chapter 14, entitled "Importation of Wild Animals", consisting of §§ $25990-25994.8$, was added Stats 1969 ch $975 \S 1$, and repealed Stats 1995 ch 415 § 166.]


Section
25997. (First of two) Punishment for infraction 25997.1. Chapter an addition

## § 25995. Legislative findings and declarations

The Legislature finds and declares all of the following:
(a) According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.
(b) A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk.
(c) Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.
(d) Salmonella is the most commonly diagnosed food-borne illness in the United States.
(e) It is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella. Added Stats 2010 ch 51 § 1 (AB 1437), effective January 1, 2011.

## Former Sections:

Former H \& S C § 25995, similar to present H \& S C § 122125, was added Stats 1976 ch 1114 § 4, amended Stats 1991 ch 1099 § 2, ch 1118 § 2, repealed Stats 1995 ch 415 § 167.

Former H \& S C § 25995, similar to present W \& I C § 1500 , was added Stats $1969 \mathrm{ch} 1361 \S 1$ as § 25970 , renumbered by Stats 1970 ch 486 § 9 , and repealed Stats 1973 ch 336 § 19.

## § 25996. Prohibition of sale of certain shelled eggs

Commencing January 1, 2015, a shelled egg shall not be sold or contracted for sale for human consumption in California if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with animal care standards set forth in Chapter 13.8 (commencing with Section 25990).
Added Stats 2010 ch 51 § 1 (AB 1437), effective January 1, 2011. Amended Stats 2011 ch 296 § 159 (AB 1023), effective January 1, 2012.

## Amendments:

2011 Amendment: Substituted "shall" for "may".

## § 25997. (First of two) Punishment for infraction

Any person who violates this chapter is guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed one thousand dollars ( $\$ 1,000$ ) or by imprisonment in the county jail for a period not to exceed 180 days or by both that fine and imprisonment.
Added Stats 2010 ch 51 § 1 (AB 1437), effective January 1, 2011.
Editor's Notes-There is another section of this number which was added Stats 1982 ch 215 § 2, effective May 26, 1982; see Chapter 15.

## § 25997.1. Chapter an addition

The provisions of this chapter are in addition to, and not in lieu of, any other laws protecting animal welfare, including the Penal Code. This chapter shall not be construed to limit any state law or regulation protecting the welfare of animals, nor shall anything in this chapter prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.
Added Stats 2010 ch 51 § 1 (AB 1437), effective January 1, 2011.

## CHAPTER 14.5

## Retail Sales of Dogs or Cats [Repealed]

[Added Stats 1976 ch $1114 \S$ 4. Chapter 14.5, consisting of §§ 25995-25996.91, was repealed Stats 1995 ch 415 § 167. See now H \& S C § 122125 et seq.]

## Section

25995.1-25996.91. [Repealed]

## § 25995.1. [Section repealed 1996.]

Added Stats 1976 ch 1114 § 4. Amended Stats 1991 ch 1099 § 2 (AB 2021), ch 1118 § 2 (SB 1128).
Repealed Stats 1995 ch 415 § 167 (SB 1360). See H \& S C § 122130.

## § 25995.2. [Section repealed 1996.]

Added Stats 1976 ch 1114 § 4. Repealed Stats 1995 ch 415 § 167 (SB 1360). See H \& S C § 122135.

## § 25995.3. [Section repealed 1996.]

Added Stats 1976 ch 1114 § 4. Amended Stats 1991 ch 1099 § 2 (AB 2021), ch 1118 § 2 (SB 1128).
Repealed Stats 1995 ch 415 § 167 (SB 1360). See H \& S C § 122140.

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Deering's California Codes Annotated<br>Copyright © 2014 by Matthew Bender \& Company, Inc. a member of the LexisNexis Group.<br>All rights reserved.<br>*** This document is current through Chapter 1 of ${ }^{* * *}$<br>the 2014 Regular Session of the 2013-2014 Legislature.<br>HEALTH AND SAFETY CODE<br>Division 20. Miscellaneous Health and Safety Provisions Chapter 14. Shelled Eggs

## GO TO CALIFORNIA CODES ARCHIVE DIRECTORY

Cal Health \& Saf Code § 25995 (2014)

## § 25995. Legislative findings and declarations

The Legislature finds and declares all of the following:
(a) According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.
(b) A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk.
(c) Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.
(d) Salmonella is the most commonly diagnosed food-borne illness in the United States.
(e) It is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella.

## HISTORY:

Added Stats 2010 ch 51 § 1 (AB 1437), effective January 1, 2011.

## NOTES:

## Former Sections:

Former $\mathrm{H} \& \mathrm{~S}$ C $\S 25995$, similar to present $H \& S C \S 122125$, was added Stats 1976 ch $1114 \S 4$, amended Stats 1991 ch 1099 § 2, ch 1118 § 2, repealed Stats 1995 ch 415 § 167.

Former H \& S C § 25995, similar to present $W \& I C \S 1500$, was added Stats $1969 \mathrm{ch} 1361 \S 1$ as $\S 25970$, renumbered by Stats 1970 ch $486 \S 9$, and repealed Stats 1973 ch $336 \S 19$.

## Hierarchy Notes:

Div. 20, Ch. 14 Note

## Westlaw．

West＇s Ann．Cal．Health \＆Safety Code § 25995

## c

Effective：January 1， 2011

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West's Annotated California Codes Currentness
    Health and Safety Code (Refs & Annos)
        *国 Division 20. Miscellaneous Health and Safety Provisions (Refs & Annos)
            ^⿴囗⿱一土⿴囗十一*
            =>->$ 25995. Legislative findings and declarations regarding treatment of egg-laying hens
```

The Legislature finds and declares all of the following：
（a）According to the Pew Commission on Industrial Farm Production，food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption．
（b）A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk．
（c）Egg－laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food－borne pathogens．
（d）Salmonella is the most commonly diagnosed food－borne illness in the United States．
（e）It is the intent of the Legislature to protect California consumers from the deleterious，health，safety，and welfare effects of the sale and consumption of eggs derived from egg－laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella．

## CREDIT（S）

（Added by Stats．2010，c． 51 （A．B．1437），§ 1．）

HISTORICAL AND STATUTORY NOTES
2014 Electronic Update
2010 Legislation

Case 2:14-cv-00341-KJM-KJN Document 37 Filed 04/09/14 Page 12 of 154

Sections 2 and 3 of Stats.2010, c. 51 (A.B.1437), provide:
"SEC. 2. If any provision of this act, or the application thereof to any person or circumstances, is held invalid or unconstitutional, that invalidity or unconstitutionality shall not affect other provisions or applications of this act or other existing state law or regulation that can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.
"SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution."

Governor Schwarzenegger issued the following signing message regarding Stats.2010, c. 51 (A.B.1437):
"To the Members of the California State Assembly:
"I am signing Assembly Bill 1437.
"This bill would prohibit the sale in California of a shelled egg for human consumption if it violates the provisions of Proposition 2, which was passed by voters in November 2008. The voters' overwhelming approval of Proposition 2 demonstrated their strong support for the humane treatment of egg producing hens in California. By ensuring that all eggs sold in California meet the requirements of Proposition 2, this bill is good for both California egg producers and animal welfare.
"Sincerely,
"Arnold Schwarzenegger"

## Former Notes

Former § 25995, added by Stats.1976, c. 1114, § 4, amended by Stats.1991, c. 1099 (A.B.2021), § 2; Stats. 1991, c. 1118 (S.B.1128), § 2, relating to retail sales of dogs or cats, and defining "retail dealer", was repealed by Stats.1995, c. 415 (S.B.1360), § 167. See Health and Safety Code § 122125.

Former § 25995 , formerly § 25970, added by Stats.1969, c. 1361, p. 2751, § 1, renumbered § 25995 and amended by Stats. 1970 , c. 486, p. $966, \S 9$, requiring that peace officers prevent entry from California into Mexico of minors under 18 without parental consent or without a passport, was repealed by Stats.1973, c. 336, p. 758, § 19. See Welfare and Institutions Code § 1500.

Case 2:14-cv-00341-KJM-KJN Document 37 Filed 04/09/14 Page 13 of 154

## RESEARCH REFERENCES

Encyclopedias
Cal. Jur. 3d Criminal Law: Crimes Against Justice § 15.50, Shelled Eggs from Noncompliant Facilities.

West's Ann. Cal. Health \& Safety Code § 25995, CA HLTH \& S § 25995

Current with urgency legislation through Ch. 3 of 2014 Reg.Sess. and all propositions on the 6/3/2014 ballot. (C) 2014 Thomson Reuters. No Claim to Orig. US Gov. Works.

END OF DOCUMENT
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## Assembly Bill No. 1437

## CHAPTER 51

An act to add Chapter 14 (commencing with Section 25995) to Division 20 of the Health and Safety Code, relating to public health.
[Approved by Governor July 6, 2010. Filed with Secretary of State July 6, 2010.]

## LEGISLATIVE COUNSEL'S DIGEST

AB 1437, Huffman. Shelled eggs: sale for human consumption: compliance with animal care standards.

Existing law, the Sherman Food, Drug, and Cosmetic Law, requires the State Department of Public Health to regulate manufacturing, sales, labeling, and advertising activities related to food, drugs, devices, and cosmetics in conformity with the federal Food, Drug, and Cosmetic Act, including, but not limited to, prohibition against the receipt in commerce of any adulterated food, as defined. A violation of these provisions is a crime.

Existing law, enacted as Proposition 2, an initiative measure approved by the voters at the November 4, 2008, statewide general election, establishes, commencing January 1, 2015, specified farm animal treatment standards.

This bill would, commencing January 1, 2015, prohibit the sale of a shelled egg for human consumption if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with those animal care standards and would make violations of these provisions a crime. This bill would declare that its provisions are severable. By creating a new crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

## The people of the State of California do enact as follows:

SECTION 1. Chapter 14 (commencing with Section 25995) is added to Division 20 of the Health and Safety Code, to read:

Chapter 14. Shelled Eggs
25995. The Legislature finds and declares all of the following:

## Ch. 51

(a) According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.
(b) A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk.
(c) Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.
(d) Salmonella is the most commonly diagnosed food-borne illness in the United States.
(e) It is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella.
25996. Commencing January 1, 2015, a shelled egg may not be sold or contracted for sale for human consumption in California if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with animal care standards set forth in Chapter 13.8 (commencing with Section 25990).
25997. Any person who violates this chapter is guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed one thousand dollars ( $\$ 1,000$ ) or by imprisonment in the county jail for a period not to exceed 180 days or by both that fine and imprisonment.
25997.1. The provisions of this chapter are in addition to, and not in lieu of, any other laws protecting animal welfare, including the Penal Code. This chapter shall not be construed to limit any state law or regulation protecting the welfare of animals, nor shall anything in this chapter prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.

SEC. 2. If any provision of this act, or the application thereof to any person or circumstances, is held invalid or unconstitutional, that invalidity or unconstitutionality shall not affect other provisions or applications of this act or other existing state law or regulation that can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime
within the meaning of Section 6 of Article XIII B of the California Constitution.

## Case 2:14-cv-00341-KJM-KJN Document 37 Filed 04/09/14 Page 17 of 154

COMPLETE BILL HISTORY

BILL NUMBER : A.B. No. 1437
AUTHOR : Huffman
TOPIC : Shelled eggs: sale for human consumption: compliance with animal care standards.

TYPE OF BILL :

> Inactive Non-Urgency Non-Appropriations Majority Vote Required State-Mandated Local Program Fiscal Non-Tax Levy

BILL HISTORY
2010
July 6 Chaptered by Secretary of State - Chapter 51, Statutes of 2010.
July 6 Approved by the Governor.
June 23 Enrolled and to the Governor at 2:30 p.m.
June 21 Senate amendments concurred in. To enrollment. (Ayes 65. Noes 9. Page 5733.)
June 17 In Assembly. Concurrence in Senate amendments pending. May be considered on or after June 19 pursuant to Assembly Rule 77.
June 17 Read third time, passed, and to Assembly. (Ayes 23. Noes 7. Page 3944.)

June 14 Read second time. To third reading.
June 10 From committee: Be placed on second reading file pursuant to Senate Rule 28.8.
May 27 Withdrawn from committee. Re-referred to Com. on APPR.
May 26 From committee chair, with author's amendments: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on HEALTH.
2009
July 13 In committee: Set, first hearing. Hearing canceled at the request of author.
July 6 In committee: Hearing postponed by committee.
July 2 From committee chair, with author's amendments: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on HEALTH.
June 24 In committee: Hearing postponed by committee.
June 16 From committee: Do pass, and re-refer to Com. on HEALTH. Re-referred. (Ayes 4. Noes 1.) (June 16).
June 11 Referred to Coms. on F. \& A. and HEALTH.
May 27 In Senate. Read first time. To Com. on RLS. for assignment.
May 26 Read third time, passed, and to Senate. (Ayes 65. Noes 12. Page 1669.)

May 18 Read second time. To third reading.
May 14 From committee: Do pass. (Ayes 10. Noes 3.) (May 13).
Apr. 30 From committee: Do pass, and re-refer to Com. on APPR. Re-referred. (Ayes 8. Noes 0.) (April 29).
Apr. 2 Referred to Com. on AGRI.
Mar. 2 Read first time.
Mar. 1 From printer. May be heard in committee March 30.
Feb. 27 Introduced. To print.

## These are the

## versions of the legislative bill

# Introduced by Assembly Member Huffman 

(Principal coauthor: Senator Florez)
(Coauthor: Assembly Member Tom Berryhill)

February 27, 2009

An act to add Chapter 14 (commencing with Section 25995) to Division 20 of the Health and Safety Code, relating to public health.

AB 1437, as introduced, Huffman. Shelled eggs: sale for human consumption: compliance with animal care standards.

Existing law, the Sherman Food, Drug, and Cosmetic Law, requires the State Department of Public Health to regulate manufacture, sale, labeling, and advertising activities related to food, drugs, devices, and cosmetics in conformity with the federal Food, Drug, and Cosmetic Act, including, but not limited to, prohibition against the receipt in commerce of any adulterated food, as defined. A violation of these provisions is a crime.

Existing law, enacted as Proposition 2, an initiative measure approved by the voters at the November 4, 2008, statewide general election, establishes, commencing January 1, 2015, specified farm animal treatment standards.

This bill would, commencing January 1, 2015, prohibit the sale of a shelled egg for human consumption if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with those animal care standards and would make violations of these provisions a crime. This bill would declare that its provisions are
severable. By creating a new crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Chapter 14 (commencing with Section 25995) is added to Division 20 of the Health and Safety Code, to read:

## Chapter 14. Shelled Eggs

25995. The Legislature finds and declares all of the following:
(a) According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.
(b) A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk.
(c) Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.
(d) Salmonella is the most commonly diagnosed food-borne illness in the United States.
(e) It is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella.
25996. (a) Commencing January 1, 2015, a shelled egg may not be sold or contracted for sale for human consumption in California if it is the product of an egg-laying hen that was confined
on a farm or place that is not in compliance with animal care standards set forth in Chapter 13.8 (commencing with Section 25990).
(b) Any person who violates this chapter is guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed one thousand dollars $(\$ 1,000)$ or by imprisonment in the county jail for a period not to exceed 180 days or by both that fine and imprisonment.
(c) The provisions of this chapter are in addition to, and not in lieu of, any other laws protecting animal welfare, including the Penal Code. This chapter shall not be construed to limit any state law or regulation protecting the welfare of animals, nor shall anything in this chapter prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.

SEC. 2. If any provision of this act, or the application thereof to any person or circumstances, is held invalid or unconstitutional, that invalidity or unconstitutionality shall not affect other provisions or applications of this act or other existing state law or regulation that can be given effect with out the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIIIB of the California Constitution.

AMENDED IN SENATE JULY 2, 2009

CALIFORNIA LEGISLATURE-2009-10 REGULAR SESSION

Introduced by Assembly Member Huffman<br>(Principal coauthor: Senator Florez)<br>(Coauthor: Assembly Member TomBerryłin Coauthors: Assembly Members Tom Berryhill, Galgiani, Lieu, Nava, and Solorio)<br>(Coauthors: Senators Hancock and Maldonado)

February 27, 2009

An act to add Chapter 14 (commencing with Section 25995) to Division 20 of the Health and Safety Code, relating to public health.

## LEGISLATIVE COUNSEL'S DIGEST

AB 1437, as amended, Huffman. Shelled eggs: sale for human consumption: compliance with animal care standards.
Existing law, the Sherman Food, Drug, and Cosmetic Law, requires the State Department of Public Health to regulate-manaeture, sale, manufacturing, sales, labeling, and advertising activities related to food, drugs, devices, and cosmetics in conformity with the federal Food, Drug, and Cosmetic Act, including, but not limited to, prohibition against the receipt in commerce of any adulterated food, as defined. A violation of these provisions is a crime.

Existing law, enacted as Proposition 2, an initiative measure approved by the voters at the November 4, 2008, statewide general election, establishes, commencing January 1, 2015, specified farm animal treatment standards.

This bill would, commencing January 1, 2015, prohibit the sale of a shelled egg for human consumption if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with
those animal care standards and would require the department to, by January 1, 2011, develop and adopt regulations regarding housing standards for egg-laying hens that are consistent with these standards. The bill would also make violations of these provisions a crime. This bill would declare that its provisions are severable. By creating a new crime, this bill would impose a state-mandated local program.
The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.
This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Chapter 14 (commencing with Section 25995) is added to Division 20 of the Health and Safety Code, to read:

## Chapter 14. Shelled Eggs

25995. The Legislature finds and declares all of the following:
(a) According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.
(b) A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk.
(c) Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.
(d) Salmonella is the most commonly diagnosed food-borne illness in the United States.
(e) It is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens
that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella.
(f) It is also the intent of the Legislature to further protect the welfare of egg-laying hens in addition to and supplemental to the protections afforded by Chapter 13.8 (commencing with Section 25990).
25996. (a) Commencing January 1, 2015, a shelled egg may not be sold or contracted for sale for human consumption in California if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with animal care standards set forth in Chapter 13.8 (commencing with Section 25990).
(b) Any
25997. The State Department of Public Health in consultation with the Department of Food and Agriculture shall, by January 1, 2011, develop and adopt regulations regarding housing standards for egg-laying hens that are consistent with the animal welfare care standards set forth in Chapter 13.8 (commencing with Section 25590).
25997.1. Nothing in this chapter, or in the regulations required pursuant to Section 25997, shall prohibit the sale of a shelled egg that is the product of an egg-laying hen confined on a farm or place in accordance with the "Floor Space Per Hen" standards contained in the 2008 Edition of the United Egg Producers Animal Husbandry Guidelines for Cage Free Production in effect as of June 15, 2009.
25997.2. Any person who violates this chapter is guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed one thousand dollars $(\$ 1,000)$ or by imprisonment in the county jail for a period not to exceed 180 days or by both that fine and imprisonment.
(e) The
25997.3. The provisions of this chapter are in addition to, and not in lieu of, any other laws protecting animal welfare, including the Penal Code. This chapter shall not be construed to limit any state law or regulation protecting the welfare of animals, nor shall anything in this chapter prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.

SEC. 2. If any provision of this act, or the application thereof 2 to any person or circumstances, is held invalid or unconstitutional, 3 that invalidity or unconstitutionality shall not affect other 4 provisions or applications of this act or other existing state law or 5 regulation that can be given effect with out the invalid or 6 unconstitutional provision or application, and to this end the 7 provisions of this act are severable.
8 SEC. 3. No reimbursement is required by this act pursuant to
9 Section 6 of Article XIIIB of the California Constitution because
10 the only costs that may be incurred by a local agency or school
11 district will be incurred because this act creates a new crime or
12 infraction, eliminates a crime or infraction, or changes the penalty
13 for a crime or infraction, within the meaning of Section 17556 of
14 the Government Code, or changes the definition of a crime within
15 the meaning of Section 6 of Article XIIIB of the California
16 Constitution.

AMENDED IN SENATE MAY 26, 2010
AMENDED IN SENATE JULY 2, 2009
CALIFORNIA LEGISLATURE-2009-10 REGULAR SESSION

# Introduced by Assembly Member Huffman 

(Principal coauthor: Senator Florez)
(Coauthors: Assembly Members Tom Berryhill, Galgiani, Lieu, Nava, and Solorio)
(Coauthors: Senators Hancock and Maldonado)

February 27, 2009

An act to add Chapter 14 (commencing with Section 25995) to Division 20 of the Health and Safety Code, relating to public health.

## LEGISLATIVE COUNSEL'S DIGEST

AB 1437, as amended, Huffman. Shelled eggs: sale for human consumption: compliance with animal care standards.
Existing law, the Sherman Food, Drug, and Cosmetic Law, requires the State Department of Public Health to regulate manufacturing, sales, labeling, and advertising activities related to food, drugs, devices, and cosmetics in conformity with the federal Food, Drug, and Cosmetic Act, including, but not limited to, prohibition against the receipt in commerce of any adulterated food, as defined. A violation of these provisions is a crime.

Existing law, enacted as Proposition 2, an initiative measure approved by the voters at the November 4, 2008, statewide general election, establishes, commencing January 1, 2015, specified farm animal treatment standards.

This bill would, commencing January 1, 2015, prohibit the sale of a shelled egg for human consumption if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with those animal care standards and would require the deparment to, by fantary 1, 2011, develop and adopt regulations regarding housing standards for egg-laying hens that are eonsistent with these standards. The bill wouldatse make violations of these provisions a crime. This bill would declare that its provisions are severable. By creating a new crime, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

## The people of the State of California do enact as follows:

SECTION 1. Chapter 14 (commencing with Section 25995) is added to Division 20 of the Health and Safety Code, to read:

## Chapter 14. Shelled Eggs

25995. The Legislature finds and declares all of the following:
(a) According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.
(b) A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment was that reducing flock prevalence results in a directly proportional reduction in human health risk.
(c) Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and the conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.
(d) Salmonella is the most commonly diagnosed food-borne illness in the United States.
(e) It is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella.
(f) It is also the intent of the Legistature to further protect the welfare of ege-laying hens in addition to and supplemental to the protections afforded by Chapter 13.8 (eommeneing with Seetion 25990).
25996. Commencing January 1, 2015, a shelled egg may not be sold or contracted for sale for human consumption in California if it is the product of an egg-laying hen that was confined on a farm or place that is not in compliance with animal care standards set forth in Chapter 13.8 (commencing with Section 25990).
25997. The State Department of Public Health in eonsultation with the Department of Food and Agrieulture shall, by Jantary 1, 2011, develop and adopt regulations regarding housing standards for ege-laying hens that are consistent with the-animal welfare eare standards set forth in Chapter 13.8 (commeneing with Section 25590).
25997.1. Nothing in this ehapter, or in the regulations required purstant to Section 25997, shall prohibit the sale of a shelled egg that is the product of an egg-laying hen confined on a farm or place in aceordane with the "Floor Spaee Per Hen" standards contained in the 2008 Edition of the United Egg Produteers Animal Husbandry Guidelines for Cage Free Produrtion in effect as of Jume 15,2009. 25997.2.
25998. Any person who violates this chapter is guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed one thousand dollars $(\$ 1,000)$ or by imprisonment in the county jail for a period not to exceed 180 days or by both that fine and imprisonment.
25997.3.
25997.1. The provisions of this chapter are in addition to, and not in lieu of, any other laws protecting animal welfare, including the Penal Code. This chapter shall not be construed to limit any state law or regulation protecting the welfare of animals, nor shall anything in this chapter prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.

1 SEC. 2. If any provision of this act, or the application thereof 2 to any person or circumstances, is held invalid or unconstitutional, 3 that invalidity or unconstitutionality shall not affect other 4 provisions or applications of this act or other existing state law or 5 regulation that can be given effect without without the invalid or 6 unconstitutional provision or application, and to this end the 7 provisions of this act are severable.
8 SEC. 3. No reimbursement is required by this act pursuant to 9 Section 6 of Article XIIIB of the California Constitution because 10 the only costs that may be incurred by a local agency or school 11 district will be incurred because this act creates a new crime or 12 infraction, eliminates a crime or infraction, or changes the penalty 13 for a crime or infraction, within the meaning of Section 17556 of 14 the Government Code, or changes the definition of a crime within 15 the meaning of Section 6 of Article XIIIB of the California 16 Constitution.

# The documents following this page were photocopied from the files of the 

Assembly Committee on

## Appropriations

Date of Hearing: May 13, 2009

# ASSEMBLY COMMITTEE ON APPROPRIATIONS <br> Kevin De Leon, Chair 

AB 1437 (Huffman) - As Introduced: February 27, 2009
Policy Committee: Agriculture Vote: $8-0$

Urgency: No State Mandated Local Program: Yes Reimbursable: No

## SUMMARY

This bill prohibits the selling of eggs still in the shell for human consumption after January 1, 2015 , if those eggs are produced by egg-laying hens that are not in compliance with California animal care standards. In addition, the bill makes it a misdemeanor to violate this prohibition, punishable by a fine of up to $\$ 1,000$, up to 180 days in a county jail or both.

## FISCAL EFFECT

Negligible, non-reimbursable costs for prosecution, offset by fine revenue, for misdemeanor violations associated with not complying with California animal care standards.

## COMMENTS

1) Rationale. With the passage of Proposition 2 in November 2008, $63 \%$ of California's voters determined that it was a priority for the state to ensure the humane treatment of farm animals. However, the proposition only applies to in-state producers. The intent of this legislation is to level the playing field so that in-state producers are not disadvantaged. This bill would require that all eggs sold in California must be produced in a way that is compliant with the requirements of Proposition 2.

Californians have a history of establishing basic animal welfare standards for the products they consume. In 1996, California voters banned the consumption, sale and transport of horse meat. In 2004, the California Legislature banned the sale of foie gras by prohibiting the sale of a product that is the result of force feeding a bird.
2) Standards for Confining Farm Animals Initiative (Proposition 2). This proposition adds a chapter to Division 20 of the California Health and Safety Code to prohibit the confinement of certain farm animals in a manner that does not allow them to turn around freely, lie down, stand up, and fully extend their limbs. The measure deals with three types of confinement: veal crates, battery cages, and sow gestation crates.

The key portion of the statute will become operative on January 1, 2015. Farming operations have until that date to implement the new space requirements for their animals, and the statute will prohibit animals in California from being confined in a proscribed manner thereafter.

# The documents following this page were photocopied from the files of the 

## Assembly Committee on

## Agriculture.

# ASSEMBLY COMMITTEE ON AGRICULTURE Cathleen Galgiani, Chair 

AB 1437 (Huffman) - As Introduced: February 27, 2009
SUBJECT: Shelled eggs: compliance with animal care standards.
SUMMARY: Prohibits selling shelled eggs for human consumption in Califormia produced by egglaying hens on farms not in compliance with animal care standards. Specifically, this bill:

1) Prohibits shelled eggs from being sold for human consumption in California if the farm or location for production is not in compliance with California animal care standard beginning January 1, 2015.
2) Allows for a fine not to exceed to $\$ 1,000$ or imprisonment in a county jail not to exceed 180 day or by both the fine and imprisonment.
3) States that provisions in this law are in addition to and do not replace any other laws protecting animal welfare.

EXISTING LAW prevents any person from tethering or confining, for all or a majority of any day, animals, specifically pigs during pregnancy, calves raised for veal, or egg-laying hens, in such a way that prevents the animal from lying and standing, fully extending limbs, and turning around completely. This begins on January 1, 2015. (Health and Safety Code Section 25900 et seq.)

FISCAL EFFECT: Unknown. This bill is keyed fiscal by Legislative Counsel.
COMMENTS: In November 2008, voters passed Proposition 2, which addressed confinement of farm animals. The law requires that certain farm animals, including egg-laying hens, have room to move freely. Freedom of movement includes the ability the stand up, lie down, extend limbs fully without touching the sides of an enclosure and turn around freely.

According to the author, requiring all eggs sold for human consumption in California to conform to the animal care standards will protect California consumer's health and welfare. Reports cited by the author state that egg-laying hens subjected to stress have a greater chance of carrying bacteria or viruses, thus having a greater chance of exposing consumers to food borne bacteria and viruses. Some supporters stated this bill will level the playing field for California egg producers to remain competitive with out-of-state egg producers.

A January 2009 report on poultry flock health in Sweden showed significantly higher rates of mortality due to bacterial and parasitic disease and cannibalism in litter based housing and free range housing for egg laying hens compared to cage housing. The report showed occurrence of viral disease was significantly higher for indoor litter based housing compared to cage housing.

California has a history of establishing animal welfare standards for products consumed here. The Legislature passed SB 1520 (Burton), Chapter 904, Statutes of 2004, which banned the sale of foie
gras by prohibiting the sale in California a product if it is the result of force feeding a bird for the purpose of enlarging the bird's liver beyond normal size.

The author's office and supporters have stated that this bill is not meant to clarify, change or expand on the current animal welfare standards relating to confinement. This bill would cause those standards to be exported to other states. The committee may wish to consider if this fits the Interstate Commerce Clause test; specifically, this is of compelling interest to California to protect public health.

## REGISTERED SUPPORT / OPPOSITION:

## Support

Alpha Canine Sanctuary
American Society for the Prevention of Cruelty to Animals
Animal Internal Medicine
Animal Place
Animal Protection \& Rescue League
Blackberry Farms
Bon Appetit Management Company
California Animal Association
Center for Food Safety
Center for Science in the Public Interest
Community Market
Farm Animal Protection Project

Farm Sanctuary
Humane Society of the United States
.Humane Society Veterinary Medical Association Physician's Committee for Responsible Medicine Planning and Conservation League Sierra Club California Tamalpais Pet Hospital The League of Humane Voters, California Chapter The Paw Project
World Society for the Protection of Animals 138 Individuals

## Opposition

None on file.
Analysis Prepared by: Victor Francovich / AGRI. / (916) 319-2084

Restaurant Soltan Banoo
Rocket Dog Rescue
Sausalito Animal Hospital
Sugar Beat Sweets
Tamalpais Pet Hospital
TCM, Inc.
Tree Axis
The Grand Slam Diet.com
Turner's Portable Welding
Urban Cat Project
Vreseis Limited (organic farm)
World Society for the Protection of Animals$2^{\text {nd }}$ Chance for Pets
102 Individuals in support
Opposition - none

BLLL NO: AB 1437
AUTHOR: Huffman
VERSION: 2/27/09

HEARING: 6/16/09
FISCAL: Yes
CONSULTANT: John Chandler

## Shelled eggs: sale for human consumption: compliance with animal care standards.

## BACKGROUND AND EXISTING LAW

In November 2008, California passed Proposition 2 with 63.5 percent of the vote. Proposition 2 specifies that on January 1, 2015, calves for veal, egg-laying hens, and pregnant pigs be confined only in ways that allow these animals to lie down, stand up, fully extend their limbs and turn around freely. The proposition provides exceptions for transportation, rodeos, fairs, 4-H programs, lawful slaughter, research and veterinary purposes. Failure to comply with the proposition can be punished with misdemeanor penalties, including a fine not to exceed $\$ 1,000$ and/or imprisonment in jail for up to 180 days.

Currently, California is the fifth largest egg-producing state in the nation with more that 19 million egg-laying hens. Iowa is the largest producer with over 52 million egg laying hens in the state.

SB 1520 (Chapter 904, Statues of 2004) bans the sale and production of foie gras, specifically the forced feeding of an animal to enlarge the liver, by 2012.

In 1998, Proposition 6, which passed with 59.39 percent of the vote, prohibited the slaughter of horses for the purpose of human consumption. Further, it prohibited the export of horses from California for the purpose of human consumption.

## PROPOSED LAW

AB 1437 will prohibit the sale of eggs in California for human consumption that do not meet the animal welfare standards of Proposition 2 by January 1, 2015.

## COMMENTS

1. Proponents state that AB 1437 will ensure standardized basic animal welfare standards for the production of shelled eggs consumed in California. While there are currently similar efforts to Prop. 2 in other states across the nation, AB 1437 will ensure that all eggs consumed in California are produced by hens raised according to animal welfare standards that meet the expectations for animal care and food safety of the California consumer. Proponents point to the United Egg Producers cage-free standards to provide a blueprint for compliance with AB 1437 and Prop. 2 welfare standards. Further, reports cited by proponents of the bill state that egg-laying hens subjected to stress are more likely to have

AB 1437 - Page 2
Case 2:14-cv-00341-KJM-KJN. Document 37 Filed 04/09/14. Page 38 of 154 higher levels of pathogens in their intestines and that poor conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens. Therefore, proponents state that AB 1437 also addresses a health and food safety issue with California eggs which they feel is not in conflict with the interstate commerce clause.
2. Opponents argue that AB 1437 should include clear standards for housing and space for egglaying hens. The standard set forth in Prop. 2 specifies that egg-laying hens may not be confined for a majority of the day in a manner that prevents the hen from lying down, standing up, fully extending her limbs, and turning around freely. Opponents feel that AB 1437 should specify enclosure size per hen, how many hens per enclosure, and if current housing systems can be used or modified to comply with AB 1437 and Prop. 2.
3. It is the specified intent of the author of AB 1437 to apply the animal welfare provisions of Prop. 2 to all chickens producing eggs sold to California consumers. Since California does import eggs from out of state, this will impact out-of-state producers. The committee may want to consider if this could be in conflict with the interstate commerce clause.
4. The Senate Rules Committee has doubled referred this bill to the Senate Health Committee as the second committee of referral. Therefore, if this measure is approved by this committee, the motion should include an action to re-refer the bill to the Senate Committee on Health.

## PRIOR ACTIONS

Assembly Floor 65-12

Assembly Appropriations 10-3
Assembly Agriculture $\quad 8-0$

## SUPPORT

$2^{\text {nd }}$ Chance for Pets
Alpha Canine Sanctuary
Animal Acres Animal
Animal Place
Animal Protection and Rescue League
Animal Welfare Advocacy
ASPCA
Avian Welfare Coalition
Bay Animal Hospital
Blackberry Farm
Bon Appétit Management Company
California Animal Association
Center for Food Safety
Center for Science in the Public Interest
Community Market Natural Foods
Compassionate Carnivores

Dr. Bauer's Advanced Wellness
East Bay Animal Advocates
Farm Animal Protection Project
Farm Sanctuary
Finance Tree, Inc
G Town G Ranch
Green Star Solution
Here's Looking at You Baby
Humane Society of Louisiana
Humane Society of the United States
Humane Society Veterinary Medical Association
Internal Medicine
Le Fort's Organic Crops
League of Humane Voters
Loving Touch Animal Massage
Marin Humane Society
Marin Vegetarian Education Group

AB 1437 - Page 3
Case 2:14-cv-00341-KJM-KJN Document 37 Filed 04/09/14 Page 39 of 154

Middleton Farm
Mt. Barnabe Farm
Natural Pet
Noah's Ark Veterinary Hospital
North Star Pet Assistance
Orange County People for Animals PAW PAC
Paw Project
Physicians Committee for Responsible Medicine
Planning and Conservation League Positively Pets!

Restaurant Soltan Banoo
Rocket Dog Rescue
Sausalito Animal Hospital
Sugar Beat Sweets
Tamalpais Pet Hospital
TCM, Inc.
The Grand Slam Diet.com
The New School of Cooking
Tree Axis
Turner's Portable Welding
Urban Cat Project
Vreseis Limited (organic farm)
World Society for the Protection of Animals 102 Individuals

## OPPOSITION

Association of California Egg Farmers

## RETURN IMMEDIATELY

## ASSEMBLY COMMITTEE ON AGRICULTURE CATHLEEN GALGIANI, CHAIR

MEASURE: AB 1437 $\qquad$ STAFF CONTACT: Paige Brokaw
AUTHOR: Huffman $\qquad$ PHONE: 319-2715

1. Origin of the bill:
a) What is the source of the bill? What person, organization, or government entity requested introduction?

Assemblymember Huffman
b) Has a similar bill been previously introduced (by any author)? If so, please identify the session, bill number and disposition of the bill.

None.
c) Has there been an interim committee report on the bill? If so, please identify the report.

None.
2. What is the specific problem or deficiency in the present law which the bill seeks to remedy?

## Backgound:

The Center for Food Safety has stated that extreme intensive confinement of egg-laying hens can have potentially serious public health and food safety implications. A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment states that reducing flock prevalence results in a direct proportional reduction in human health risk. Egglaying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and poor conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.

According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.

Californians have a history of establishing basic animal welfare standards for the products they consume. In 2004, the California Legislature passed SB 1520 (Burton), which banned the sale of foie gras by prohibiting the sale in California a product if it is the result of force feeding a bird for the purpose of enlarging the bird's liver beyond normal size (Health \& Safety Code, Chapter 13.4, Section 25980).

In November 2008, Californians approved Proposition 2 by a 63.5 percent margin. Proposition 2 was favored by voters in 47 of California's 58 counties and received more "yes" votes than any other citizen initiative in California history. The proposition prohibits the confinement of an egg-laying hen, defined as any female domesticated chicken, turkey, duck, goose, or guinea fowl kept for the purpose of egg production, in California to be capable of lying down, which restricts her ability to stand up, turn around, and spread her
wings. This legislation will ensure the hens that provide our eggs are raised to the same animal welfare standards to meet the expectations for animal care and food safety of the California consumer.

Specifically, AB 1437 will require all shelled eggs sold in California as of January 1, 2015 be in compliance with the basic animal care standards set forth in Health and Safety Code § 25990.
3. Please attach TWO STAPLED copies of any background material in explanation of the bill, state where such material is available for reference by committee staff. (S.B.'s PLEASE ATTACH POLICY, FISCAL \& FLOOR ANALYSES.)
4. Please attach 2 copies of letters of support or opposition from any group, organization, or governmental agency. (PLEASE SUBMIT ONE ORIGINAL AND ONE COPY OF WORKSHEET WITH ATTACHMENTS.)
5. If you plan substantive amendments to this bill prior to hearing, please explain briefly the substance of the amendments to be prepared and bring what is taken to Legislative Counsel immediately to the committee office. NOTE: ORIGINAL (SIGNED) PLUS NINE COPIES OF LEGISLATIVE COUNSEL AMENDMENTS MUST BE RECEIVED BY THE COMMITTEE AT LEAST 10 LEGISLATIVE DAYS PRIOR TO THE HEARING DATE.

None are planned.
6. How much time do you think will be necessary to consider this bill in the committee?

10 minutes
RETURN TO: ASSEMBLY COMMITTEE ON AGRICULTURE ROOM 362, 1020 N STREET (LOB) PHONE: 319-2084 ATTENTION: MONA WOOD FAX: 319-2184

# An HSUS Report: A Comparison of the Welfare of Hens in Battery Cages and Alternative Systems 

Sara Shields, Ph.D., and lan J.H. Duncan, Ph.D. $\dagger$


#### Abstract

Housing systems for egg-laying hens range from small, pasture-based flocks to large, commercial-scale operations that intensively confine tens of thousands of hens indoors. The overwhelming majority of laying hens used for commercial egg production in the United States are confined in battery cages and provided $432.3 \mathrm{~cm}^{2}$ ( $67 \mathrm{in}^{2}$ ) of space per bird. Cages prevent hens from performing the bulk of their natural behavior, including nesting, perching, dustbathing, scratching, foraging, exercising, running, jumping, flying, stretching, wingflapping, and freely walking. Cages also lead to severe disuse osteoporosis due to lack of exercise. Alternative, cage-free systems allow hens to move freely through their environment and to engage in most of the behavior thwarted by battery-cage confinement. Given their complexity, cage-free systems can be more challenging to manage and may require superior husbandry skills and knowledge. Laying hens must be genetically suited to the alternative housing system to realize its full welfare advantages. Regardless of how a battery-cage confinement system is managed, all caged hens are permanently denied the opportunity to express most of their basic behavior within their natural repertoire. The science is clear that this deprivation represents a serious inherent welfare disadvantage compared to any cage-free production system.


## Cages and Alternative Systems

Three basic housing systems are used in commercial egg production in the United States: battery cages, barns, and free-range.

An estimated $95 \%{ }^{1}$ of the 280 million hens in the U.S. egg-laying flock ${ }^{2}$ are confined in battery cages. ${ }^{3}$ Egg industry guidelines recommend $432.3 \mathrm{~cm}^{2}$ ( $67 \mathrm{in}^{2}$ ) of floor space per typical egg-laying hen, ${ }^{4}$ and the most commonly used cages hold 5-10 birds per cage. ${ }^{5}$ Cages are placed side by side, lined in rows, and stacked in tiers up to five levels high; tens of thousands of hens can be caged in a single building. Conventional battery cages provide a feed trough and water lines, but are otherwise barren environments. Scientists using preference testing techniques have demonstrated that hens generally prefer more space than is provided to them in a conventional battery cage. $6,7,8,9,10$

Alternative laying hen housing systems, barns and free-range, vary widely both in design and management practices and requirements but, in contrast to battery cages, allow birds to move about freely. In barn systems, hens do not have outdoor access but are provided with nest boxes and often perches and loose substrate (litter or sand) for dustbathing, scratching, and foraging. Barns may be single- or multi-level structures. Single-level barns may be "deep-litter" systems, similar to the conditions in which broiler (meat-type) chickens are raised, or designed with perforated flooring, which allows manure to drop into a pit below. Multi-level barns (aviaries or

[^0]percheries) utilize vertical space within the building and enable hens to move within multiple stories. Free-range systems, whether small, backyard flocks or large-scale production operations, provide both a protected indoor shelter or barn area and outdoor access.

## Measures of Welfare

Welfare encompasses both the physical and psychological well-being of an animal. A housing system may affect the welfare of hens in a number of different ways. Scientists studying animal welfare generally agree that the best approach to assessing welfare is to integrate information across disciplines, using several different methodologies. ${ }^{11,12,13}$ As such, to determine an animal's welfare in a given housing system, indicators such as mortality rate, physiological measures (typically of stress indicators), disease and health status, behavior, and productivity must be examined together. Analyzing a sole indicator, such as productivity, can often be misleading if other indicators suggest a conflicting conclusion. A holistic approach to evaluating welfare, using all the available science, results in a more complete assessment.

## Natural Behavior and Behavioral Needs

Domesticated animals largely retain the basic behavioral repertoire of their wild counterparts. ${ }^{14,15}$ Although selective breeding over thousands of years has altered animals in some ways through the process of domestication, natural selection has had a much stronger influence in shaping animal behavior over hundreds of thousands, if not millions, of years. Some behavior is so deeply engrained in the animals' genetic makeup that it will persist even in environments that no longer require that behavior for survival. Colloquially, this type of behavior is known as instinct, but ethologists (scientists who specialize in the study of animal behavior) describe it in terms of motivation and behavioral needs-strongly motivated behavior controlled largely by internal factors (such as changes in hormone levels) that are present no matter what type of external environment is provided. ${ }^{16}$

Artificial housing environments often prevent the expressions of certain natural behavior, including many that are behavioral needs. Behavior identified as important for the well-being of hens, includes nesting, perching and roosting, scratching and foraging, dustbathing, engaging in comfort behavior (such as wing-flapping and preening), exercising, and exploring.

## Nesting

Nesting behavior is so important to the laying hen that it is often used as a prime example of a behavioral need. ${ }^{17}$ Under natural conditions, approximately 90 minutes before oviposition (egg laying), a hen locates a remote, private place in which she carefully scrapes out a shallow hollow in the ground and builds a nest. Very similar behavior can be seen in non-cage husbandry systems for hens. ${ }^{18,19}$ Nesting behavior is triggered internally with a sudden rise in progesterone against a background of fairly high estrogen levels. This hormonal fluctuation, associated with ovulation, then results in nesting behavior approximately 24 hours later. ${ }^{20,21}$ The internal, biological signals to perform nest-site selection and nesting behavior occur no matter what the external environment. ${ }^{22}$ Studies have shown that hens are highly motivated to gain access to a nest site when they are about to lay an egg. ${ }^{23,24}$ Caged hens prior to oviposition are restless, show stereotypic pacing and escape behavior, or perform "vacuum" nesting activity, the expression of the motions of building a nest in the absence of appropriate nesting materials. Decades of scientific evidence suggest that hens are frustrated and distressed, and that they suffer in battery cages because there is no outlet for nesting behavior. ${ }^{25,26,27,28,29,30,31}$

## Perching and Roosting

Barren with wire mesh flooring, conventional battery cages also prevent hens from perching and roosting. Perching is another natural behavior of the hen. When given the opportunity, hens normally roost high in the trees at night. The scientific literature suggests that the foot of a hen is "anatomically adapted to close around a perch ${ }^{\prime 32,33}$-that is, their feet evolved to clutch onto branches. Perch use is important for maintaining bone
volume and bone strength. ${ }^{34,35,36}$ Perches can also serve as refuges for hens to avoid interactions with more aggressive hens. ${ }^{37}$

In a naturalistic setting, roosting behavior is thought to function in protecting chickens from predation at night, but evolutionary history continues to drive the hen's need to perform the behavior, even in the industrialized production environment. When perches are provided in cages, hens may spend $25-41 \%$ of day time on them, ${ }^{38,39,40}$ though this may be the birds' method of utilizing the extra space. ${ }^{41}$ Hens immediately begin to use perches when the lights go off at night, and, in one study, within 10 minutes, more than $90 \%$ of all hens were found on perches. ${ }^{42}$ When perch space is limited, hens will crowd together for roosting space at night. ${ }^{43}$ In motivational analysis experiments, hens show behavior indicative of frustration when thwarted from accessing a perch. ${ }^{44}$ They are also willing to push through an increasingly heavily weighted door for perch access. ${ }^{45}$ Thus, many studies conclude that hens are highly motivated to a perch. ${ }^{45,47,48}$

## Scratching and Foraging

The wire floor of a battery cage also deprives hens of the opportunity to express normal foraging and scratching behavior. Hens are behaviorally adapted to engage in these activities, which would normally take place in loose, varied ground cover. The birds scratch the earth in search of food and as a means of exploring the environment, and studies have reported that domestic fowl spend more than $50 \%$ of their active time foraging. ${ }^{49,50}$ Batterycaged hens are fed a concentrated diet, yet, like other animals in captivity, ${ }^{51}$ their natural urge to forage remains strong, despite the presence of a complete diet fed ad libitum. Studies have shown that hens will choose to forage for feed on the ground in loose substrate rather than eat identical food freely available in a feeder. ${ }^{52,53}$ The lack of appropriate foraging substrate may lead to redirected pecking and to the development of abnormal feather-pecking behavior. ${ }^{54}$

## Dustbathing

The absence of loose litter in a battery-cage environment is also behaviorally restrictive as hens are prevented from performing normal dustbathing behavior. Dustbathing keeps chickens' feathers and skin in healthy condition. Given access to dry, friable substrate, such as dirt, wood shavings, or peat, hens would normally dustbathe approximately once every other day. During a dust-bath, the hen crouches, lies in, and rubs dust through her feathers before standing and shaking off the loose particles. The best experimental evidence suggests that the function of dustbathing is to balance lipid levels in the feathers. ${ }^{55,56,57}$ However, dustbathing is caused by a variety of factors, some of which are external ${ }^{58}$ and others internal. ${ }^{59,60}$ Light and heat trigger dustbathing, as does the presence of a friable, dusty substrate, but even when deprived of these normal eliciting stimuli, hens in battery cages will still try to dustbathe on the wire floor. Peripheral factors, emanating from the feathers (including ectoparasites), seem to be unimportant since even featherless chickens will dustbathe. ${ }^{61}$ Although there has been a report of dustbathing deprivation leading to stress, ${ }^{62}$ others have suggested that dustbathing is not driven by a need, but is a pleasurable activity. ${ }^{63}$ This does not lessen its importance, since good welfare is dependent on both an absence of suffering and a presence of pleasure. ${ }^{64}$

## Engaging in Comfort Behavior

Many studies have shown that comfort behavior important for body maintenance and care of feathers, such as stretching, wing-flapping, body-shaking, and preening, are reduced or adversely affected in some way by the battery-cage environment. ${ }^{65,66,67,68}$ The social spacing in a typical battery cage is restrictive to the point that hens may perceive their environment as being too small to engage in comfort behavior. Therefore, even if it is physically possible to perform these simple movements, they may not. Researchers comparing behavior in cages and cage-free systems concluded that an aviary was "a more comfortable environment for birds." ${ }^{69}$

## Exercising

Hens in cages are so intensively confined that they have no opportunity to exercise and are not exposed to the normal range of physical forces that structure their bones. The scientific literature provides ample evidence that restriction of normal movement patterns to the extent found in cages causes physical harm in the form of bone weakness. Dynamic loading is a process that occurs during normal movements and causes stresses and strains to bone and muscle that keep the skeletal system healthy. The lack of exercise in cages leads to bone fragility and impaired bone strength. ${ }^{70,71,72,73}$ While all hens selectively bred for egg production are prone to skeletal weakness due to osteoporosis (see below), caged hens are more prone to the disease due to lack of exercise. Several studies have compared the bone strength of caged hens to those in perchery and deep-litter systems. Findings conclude a very significant reduction in bone strength in the birds in cages. ${ }^{74,75,76}$ This problem is so severe that in one study, $24 \%$ of birds removed from their cages at the end of the laying period suffered from broken bones. ${ }^{77}$

Preference testing has demonstrated that hens prefer more space than is typically allotted to them in a conventional battery cage and that when given the opportunity to choose between enclosures that differ in size, they will generally choose the larger enclosure. ${ }^{78,79,80,81,82}$ Preference tests have also demonstrated that space per se may not be as important as access to other resources, such as a littered or grass flooring and outdoor access. ${ }^{83,84,85}$ Additionally, smaller areas may temporarily be preferred for particular activities, such as nesting. ${ }^{86}$

## Exploring

Hens are naturally inquisitive, curious animals. Scientists have argued that exploratory behavior is important to animals on several grounds: Exploration satisfies the motivation to acquire information about the surrounding environment, creates agency and competency, and is also an end in itself. ${ }^{87,88,89}$ Some have further argued that situations that deny environmental challenge (because they are barren and devoid of natural stimuli) deprive animals of "the very core on which their physical existence is based, namely the ability to act." ${ }^{30}$ Exploratory behavior may be independent of goal-directed behavior (e.g., searching for a suitable nest site or foraging for food) as chickens continue to display exploratory behavior even when the functional consequences of this behavior (e.g., nest sites and nutritious food) is present. ${ }^{91}$ Exploratory behavior is likely a behavioral need. ${ }^{92}$

Free-range systems offer benefits for exploration that no other system can provide. Only the day-to-day changes in an enriched outdoor environment offer novelty to the extent that chickens and other animals need in order to satisfy the natural drive to investigate, manipulate, and interact daily with a variety of interesting stimuli. Animals are biologically prepared to experience such a variable environment; the complexity of a dynamic environment is engaging, heightens interest, and adds to animals' quality of life. The rich, diverse outdoor environment stimulates exploratory behavior and elicits pecking and scratching. ${ }^{93}$ Enriched environments influence the physical, mental, and social well-being of animals and can improve animal health. ${ }^{94}$

The converse is also true: Barren, restrictive environments are detrimental to the psychological well-being of an animal. When environments are predictable, monotonous, and unchanging, they do not offer the degree of stimulation or opportunity for choice that would be found in natural environments. ${ }^{95}$ Scientists have suggested that environmental challenge is an integral part of animal well-being and that barren environments lacking challenge and stifling exploration engender apathy, frustration, and boredom. ${ }^{96,97}$ While single- and multi-level barn housing systems are not as engaging as free-range systems, they do provide more environmental enrichment and opportunity for stimulation than does a barren battery cage.

## Conclusions on Behavior and Behavioral Needs

John Webster, Emeritus Professor of Animal Husbandry of the University of Bristol, Department of Clinical Veterinary Science, has stated that "the unenriched battery cage simply does not meet the physiological and behavioural requirements of the laying hen, which makes any quibbling about minimum requirements for floor space superfluous. ${ }^{1988}$ Indeed, behavioral restriction is a severe problem in conventional battery cages. Without
the opportunity to engage in behavior that is important to the hen, quality of life is poor, and physical and psychological health is impaired. In a review of the scientific literature, the European Food Safety Authority's Scientific Panel on Animal Health and Welfare (AHAW), an independent advisory body that provides a sciencebased foundation for European policies and legislation, concluded: "Housing systems for hens differ in the possibilities for hens to show species specific behaviours such as foraging, dust-bathing, perching and building or selecting a suitable nest....Hens should be provided with sufficient space to allow the movements described above to be carried out by each bird taking into account the presence of other birds and the frequencies of exercise and other activities required by the birds to avoid significant frustration, or deprivation or injury."99 Clearly, science supports what common sense dictates about the extreme confinement of hens in barren battery cages: Welfare is compromised to an unacceptable degree by preventing the expression of so many important behavioral activities.

## Abnormal Behavior: Cannibalism and Feather-Pecking

Some abnormal behavior of birds may cause severe injury and even death, such as feather-pecking and its most severe form, cannibalism. There are a number of underlying genetic and production management causes, including crowding, barren environments, and lack of loose litter. ${ }^{100,101,102,103,104,105}$ Some hen strains are more likely to develop the behavior than others, particularly the medium-heavy brown hybrid birds. ${ }^{106}$

Cannibalism is a learned behavior, passed on from one hen to another, ${ }^{107}$ and has been reported in all types of housing systems. ${ }^{108}$ Once an outbreak occurs, it is very difficult to control. The potential for the behavior to spread may be increased in large flocks, ${ }^{19}$ as more birds are likely to learn the behavior or to become victims. ${ }^{110}$ Due to the restrictive nature of battery cages, hens are unable to access many other birds, which may make the behavior easier to manage, ${ }^{111}$ although, feather-pecked hens in cages are unable to escape more aggressive cagemates.

Within the egg industry, beak-trimming (also referred to as partial beak amputation) is commonly performed as a preventative measure as injurious pecking is a potential problem in commercial-scale cage and non-cage operations. However, the mutilation is a welfare issue in itself as it is painful, deprives the hen of important sensory information provided by the highly innervated beak tip, ${ }^{112,113}$ and is performed without anesthetics or analgesics. ${ }^{114}$ One systematic review, after beak-trim status and strain were accounted for, found no difference in rates of cannibalism ${ }^{115}$-that is, cannibalism rates were not determined to differ between beak-trimmed hens of the same strain raised in cage versus cage-free systems.

As cannibalism can result in high mortality, mitigating outbreaks is necessary for any production operation, particularly those with high stocking densities and/or non-beak-trim practices. ${ }^{116}$ Important steps can be taken to minimize risk of feather-pecking behavior, including providing sufficient space and access to resources such as properly nutritious feed, water, nest boxes, and perches; providing mash rather than pelleted feed; separating injured and low body weight individuals; installing visual barriers; avoiding lighting programs designed to bring about early onset of lay; and, importantly, providing an enriched environment with attractive foraging materials. ${ }^{117,118,119,120}$ Further, housing that allows potential victims to avoid aggressors may also aid in preventing injurious pecking. ${ }^{121}$ Ultimately, a potential solution to this particular problem is selective breeding for hen strains showing little cannibalistic behavior. ${ }^{122,123,124,125,126}$

In sum, the complexities of preventing and addressing this abnormal behavior are many:
[ $N$ ]eural and behavioral evidence suggests that beak trimming reduces welfare through causing both acute and chronic pain. The problem is that beak trimming is carried out for the very good reason of preventing or controlling feather pecking and cannibalism, which can themselves cause great suffering. Faced with this dilemma, what are producers to do? If they do not trim beaks, then feather pecking and cannibalism may cause enormous suffering. If they do trim beaks by conventional methods, the birds will suffer from acute and chronic pain...It is known that feather pecking has hereditary characteristics... and that its incidence may have been increased by unintentional genetic selection....It
therefore seems likely that the long-term solution to this problem will be a genetic one...Chopping off parts of young animals in order to prevent future welfare problems is a very crude solution. ${ }^{127}$

## Health, Disease, and Injury

## General Disease Considerations ${ }^{\ddagger}$

Laying hens can suffer from infectious diseases, parasites, and production-related metabolic and reproductive diseases both in cages and cage-free systems; however, the housing environment can affect the type and extent of disease risks. Systematic studies of disease incidence are uncommon, ${ }^{128}$ though, so accurately gauging the true extent of diseases on cage and cage-free farms in the United States is challenging.

Access to the outdoors can influence the type of disease risks to which hens are exposed. For example, outdoor flocks may be exposed to wild birds, insects, and other potential infectious agents, ${ }^{129}$ and may come into contact with bacteria and intestinal parasites, such as certain nematodes and cestodes (worms) and coccidia. ${ }^{130,131,132,133}$ Pullorum disease, a type of Salmonella infection, is currently rare in commercially raised chickens, but may occur in backyard flocks ${ }^{134}$ if appropriate precautions are not taken. ${ }^{135} \mathrm{It}$ was once widely believed that freerange chickens were more likely to come into contact with the bacterium Campylobacter jejuni, ${ }^{136}$ but a 2008 research report suggests that this is not the case. ${ }^{137}$ Concurrently, other disease risks are minimized by factors associated with the outdoor, free-range environment: Natural sunlight kills many pathogens and virus particles, and the lower stocking densities and access to fresh air typical of free-range flocks lower infection and transmission rates. ${ }^{138}$ Disease risks can be heightened by overcrowded and unsanitary outdoor environments, necessitating responsible management, including rotation of fields or paddocks.

A separate but related disease risk factor is the degree to which hens are crowded. Confinement rearing and high-density flocks increase exposure to protozoal infections with short, direct life cycles, such as coccidiosis and cryptosporidosis. ${ }^{139}$ Where stocking density is high, the environmental pathogen load may be correspondingly heavy, and bird-to-bird contact will be more frequent. Such overcrowding has been implicated as a factor in the emergence of highly pathogenic strains of avian influenza. ${ }^{140}$

The risk of enteric disease is heightened by contact with droppings, which can occur in deep-litter and freerange systems, not only for laying hens, but for all birds reared on litter, including breeding birds used to produce hatching eggs for commercial egg producers, and is exacerbated by high stocking density as well as wet and cool conditions. ${ }^{141}$ Therefore, in a barn system, litter that stops working, leaking drinkers, and an inadequate ventilation system (to remove water vapor) may all increase disease risk. ${ }^{142,143}$ Similarly, inadequate rotation of fields or paddocks in free-range systems may elevate disease incidence by allowing build-up of diseaseproducing organisms in the soil. Risk of disease can be reduced in barn housing by removing some of the droppings (e.g., via a belt in aviary and perchery systems, for example) or by preventing birds from accessing heavily soiled areas (e.g., by placing drinkers on a raised, slatted platform above a manure pit).

Free-range conditions greatly reduce the risk of respiratory disease in hens. In indoor systems, the risk of infection may be increased by high levels of ammonia and fecal dust, which can damage the respiratory tract. ${ }^{144}$

Disease risk in cage-free systems can be reduced by a variety of means. In barn housing, providing good ventilation, ${ }^{145}$ maintaining litter in friable condition, ${ }^{146}$ using dewormers, ${ }^{147}$ stocking hardy laying hen strains resistant to intestinal parasites ${ }^{148}$ and introducing only parasite-free, healthy pullets, ${ }^{149}$ feeding diets that improve resistance, ${ }^{150}$ reducing flock size and stocking density, ${ }^{151,152}$ and practicing responsible biosecurity measures that reduce the likelihood of pathogen spread all minimize risk of disease. For free-range systems, in addition to

[^1]these steps, disease risk can also be reduced by utilizing pasture rotation to regenerate soil, regularly mowing or grazing to keep short vegetation on pasture, using only land with good drainage, removing heavily contaminated soil around the house before introducing a new flock, and installing fencing and bird mesh to exclude wild birds and other animals. ${ }^{153,154,155}$

## Parasites

Coccidia, intestinal parasites that are shed in fecal material, may affect all types of poultry in all types of housing systems, ${ }^{156}$ though caged hens are generally protected by separation from their fecal material, which breaks the parasite's lifecycle. For birds raised in cage-free systems, coccidiosis is not normally problematic when, as pullets, they are reared on the floor and given a low level of coccidiostat to develop premunity. ${ }^{157}$

To reduce the incidence of coccidiosis, as well as other diseases, flocks should be stocked with healthy pullets. As with other types of poultry, coccidiosis can be controlled in laying hens by feeding them anticoccidial medication. Since personnel traffic between pens, houses, and farms can spread coccidiosis, ${ }^{158}$ careful management, particularly with sanitation or biosecurity precautions such as limiting movement between flocks, will also help prevent its spread. Small flocks with low stocking density typically develop immunity through low level exposure. ${ }^{159}$

Another parasitic disease of the intestinal tract, histomoniasis, also known as Blackhead, is a re-emerging disease in alternative housing systems for laying hens in Europe. ${ }^{160}$ Widespread outbreaks are also causing severe clinical disease in broiler chicken breeders and laying hen pullets (who are reared on littered floors) used for both battery cage and cage-free production systems in the United States. The problem has been compounded by bans on nitroimidazoles used to treat the disease in both the United State ${ }^{161}$ and Europe ${ }^{162}$ due to human health concerns. Histomoniasis is indeed a cause for concern, as mortality can be very high in infected chicken flocks, ${ }^{163}$ but is not limited to affecting hens in cage-free production systems.

Red mites, also called chicken mites, are another external parasite of concern for laying hens, particularly those reared in alternative systems ${ }^{164,165}$ in European countries where the legal use of drug compounds that have been used in the past have become increasingly restricted. ${ }^{166}$ New treatments, such as the acaricidal drug phoxim, are proving to be highly effective ${ }^{167}$ without exceeding maximum residue levels set by the Council of Europe. ${ }^{168}$ Further, several effective natural products are currently available or under development. ${ }^{169,170}$ As well, in the United States, approved acaricidal products have always been permitted for use. Although red mites are less common in cage-layer operations, they are more problematic on industrial broiler chicken breeder facilities. ${ }^{171}$ Nevertheless, according to the management guide for Hy-Line $®$ strain hens, mites, in general, are a cause of increasing concern for both battery cage and free-range laying hens. ${ }^{172}$

## Respiratory Disease

Dust and micro-organisms may be found at higher levels in alternative systems when birds are housed indoors on loose litter. High levels of dust may lead to respiratory problems, but these levels are seldom reached in commercial egg production systems. ${ }^{173}$ Cage-free egg producers can use clay pellets for bedding and sprinkler systems to reduce dust levels. ${ }^{174}$ Ammonia levels in alternative systems can be higher than in conventional cages, which can be detrimental to hen respiratory and eye health, but good manure management, including frequent removal and manure drying, can reduce ammonia to safe levels. ${ }^{175,176}$

## Fatty Liver Hemorrhagic Syndrome (FLHS)

A major cause of mortality in commercial flocks, ${ }^{177} \mathrm{FHLS}$ is characterized by excessive fat deposits in the hen's liver and abdomen. The liver softens and becomes more easily damaged, and, if the fat oxidizes, blood vessels in the liver may rupture, resulting in massive bleeding and death. ${ }^{178,179}$ Caged laying hens on high energy diets are the most frequently affected by this disease, ${ }^{180,181}$ and multiple sources suggest that restriction of movement and lack of exercise, inherent in battery-cage systems, are factors that predispose the birds to FLHS. ${ }^{182,183,184,185}$

## Foot Disorders

The type of floor surface in any housing system will positively or negatively affect the foot health of hens. Two common foot disorders of laying hens are toe pad hyperkeratosis and bumblefoot, which is thought to be more painful and of greater welfare significance. ${ }^{186}$

Toe pad hyperkeratosis, a thickening of skin on the feet of hens, is thought to be caused by pressure on the claw fold due to the sloping wire floor of a cage, ${ }^{187}$ the disorder has been demonstrated to be worse in cages where hens stand on wire flooring than in systems that allow birds to perch. ${ }^{188,189}$ Severe hyperkeratosis may be accompanied by deep epithelial lesions (open sores) and/or swelling of the foot pads. ${ }^{190}$

Bumblefoot is a bulbous swelling of the footpad caused by a localized infection. ${ }^{191}$ As the disorder is related to perch use, incidence of bumblefoot is typically greater in cage-free systems compared to conventional cages that are barren, ${ }^{192,193}$ yet while the precise cause is not known, some hen breeds are more susceptible than others, and the condition is associated with poor hygiene and poor perch design, ${ }^{194,195}$ both issues of management practice rather than housing system. According to AHAW, in many studies, the use of plastic perches or the commonly used soft wooden perches measuring $25 \mathrm{~mm}(0.98 \mathrm{in})$ in width is thought to have been the cause of poor foot health as manure and moisture are able to accumulate on the structure's top where the birds' feet rest. ${ }^{196}$ Incidence of bumblefoot can be reduced by providing hens with hardwood perches that are 38 mm ( 1.49 in ) in diameter with a flattened top ${ }^{197,198}$ and by limiting walking exposure to mud and manure. ${ }^{199}$

## Keel Bone Disorders

Deformities of the keel bone are thought to occur when hens roost in places other than purpose-built perches, such as on the edge of feeders, water lines, or boxes for containing loose litter. One study reported that $25 \%$ of aviary-housed hens had keel bone deformities, ${ }^{200}$ though another reported that the level of keel bone deformities can also be high ( $16.7 \%$ ) in caged laying hens. ${ }^{201}$ There are strain differences in the propensity to develop keel bone deviations. ${ }^{202}$ Occasionally, deviation of the keel bone can develop into bursitis, ${ }^{203}$ inflammation between the bone and muscle. However, keel bone deformities can be reduced-or eliminated completely, as was the case in one study-by selective breeding for improved skeletal strength ${ }^{204}$ and by improved design and layout of barn housing fixtures, such as perches. ${ }^{205,206}$

## Osteoporosis

Osteoporosis due to lack of movement is a severe problem in caged laying hens. It is well-documented in the scientific literature that bone strength is improved in alternative housing systems compared to conventional battery cages. ${ }^{207,208,209,210,211,212}$ Studies have demonstrated that restriction of movement, especially the thwarting of normal behavior such as stepping and wing-flapping, is the primary cause of bone fragility for laying hens ${ }^{213,214}$ and that exercise improves bone strength. ${ }^{215}$ Osteoporosis can lead to bone fractures and cage layer fatigue. ${ }^{216}$

## Cage Layer Fatigue

Cage layer fatigue was first identified when laying hen flocks were moved into cages during the advent of intensive farming in the 1950s and continues to be a "major issue." The disease is "virtually unheard of" in birds who are not raised in cages. ${ }^{217}$ Cage layer fatigue is related to osteoporosis in that it is a consequence of skeletal depletion due to high, sustained egg output; bone is the metabolic reservoir for calcium used in egg shell formation. ${ }^{218}$ The skeletal system of hens suffering from cage layer fatigue can become so weak that hens become paralyzed. Affected birds may have fractured thoracic vertebrae associated with compression and degeneration of the spinal cord. ${ }^{219}$ However, if they are removed from their cages and allowed to walk normally on the floor (that is, if they are allowed to exercise) and are given feed and water, some may recover spontaneously. ${ }^{220,221,222}$ Unattended birds will die from dehydration and starvation in their cages. ${ }^{223,224}$

## Bone Fractures

One of the most serious threats to hen welfare in both cage and cage-free systems is the prevalence of bone fractures. Poor skeletal bone mass of laying hens may have occurred as a consequence of selective breeding to maximize egg production, ${ }^{225}$ as calcium needed for shell formation is diverted from bone. ${ }^{226}$ Modern laying hens produce more than 250 eggs per year, ${ }^{227}$ compared to 100 eggs per hen per year a century ago ${ }^{228}$ The calcium requirement for today's extremely high rate of egg production is immense, and moving calcium from bone to egg shell leaves the hen prone to osteoporosis. Although nutrition plays a role in reducing the severity of osteoporosis, changes in genetics and housing are more important. ${ }^{229}$ AHAW noted that the prevalence of bone fractures that hens sustain during the laying period appears to be increasing. ${ }^{230}$

Osteoporosis and the accompanying bone weakness are worse in caged hens, due to lack of exercise, while hens in cage-free systems experience bone fractures at a higher rate than hens in cages, most likely because they have more opportunities to move. Indeed, it has been suggested that birds in cage-free systems, compared with those in barren cages, face greater structural complexity that can increase the risk of fractures due to collisions and falls, ${ }^{231}$ during unsteady landings as hens fly down from one level to another in aviary systems or as they fly down from perches, for example. However, even birds in battery cages and single-level cage-free systems, where the risk of crash landings would be expected to be low, are prone to fractures. ${ }^{232,233}$ Hens with fractures must endure the pain associated with their injuries throughout the process of healing, as fractures generally go unnoticed by producers.

Studies on fractures sustained by laying hens have produced a wide range of findings. Some estimates have found that a high number of hens in free-range and other cage-free systems suffer from bone fractures, with prevalence varying between $50-78 \%$ of birds having old breaks by the time they have reached the end of the laying period, ${ }^{234,235}$ while at least one study reported no bone fractures at all for cage-free hens. ${ }^{236}$ Earlier studies from the 1990s show a lower incidence, ${ }^{237}$ with $2-42 \%$ of free-range and $11-30 \%$ of perchery hens having old bone breaks. ${ }^{238}$ However, although the incidence of old breaks obtained during the laying period are higher for uncaged hens, caged hens are also prone to fractures. Recent studies have reported $11 \%$ and $26 \%$ incidences of old breaks in commercial strain caged hens. ${ }^{239,240}$ Studies from the 1990s put the incidence of old breaks for caged hens between $0-15 \%{ }^{241,242,243}$ Further, one study reported that the incidence of pathologic breaks during the laying period can be worse in caged hens; the study tested the same genetic strains in both cage and aviary systems and found that $31.9 \%$ of caged hens who died during the first trial of the study had recently broken bones, compared to only $4.6 \%$ of aviary hens. The numbers were lower in the second trial, when a different genetic strain was used: $12.8 \%$ of caged hens died with recent breaks, while only $1.3 \%$ of aviary hens had recent breaks. ${ }^{244}$ Another study also found that bone fractures were the main cause of mortality in caged hens. ${ }^{245}$ Because the problem is worsening, while at the same time aviary housing has become more popular, estimates that are not direct comparisons between cage and cage-free systems that account for strain differences may be misleading, especially if old figures for caged hens are compared to new figures for hens in cage-free systems.

At the end of the egg-laying cycle, when productivity wanes and the entire flock is to be culled and replaced with new pullets, the "spent" hens are removed in a process termed "depopulation." Catching crews gather the birds and either crate them for transport to a slaughter plant or, as is increasingly the case, the hens are placed into a gas-filled container for killing on-site. Bone breaks occur with alarming frequency during depopulation of caged hens for two primary reasons: 1) their bones are especially weak due to lack of exercise, and 2) cages are poorly designed for bird removal. A 2005 study reported that nearly $25 \%$ of caged hens suffered from fresh bone breaks during depopulation, while just slightly more than $10 \%$ of hens from barn and free-range housing systems suffered bone breaks as they were caught during depopulation. ${ }^{246}$ Early studies from 1989 and 1990 report similar to slightly lower rates of newly broken bones in hens removed from cages at the end of the laying period, with estimates ranging between $16-24 \% .{ }^{247,248}$ If hens are transported, unloaded, and shackled for slaughter, the proportion of birds with broken bones may increase to approximately $30 \% .{ }^{249,250}$ When housing systems were compared, less than half that amount- $14 \%$-of free-range hens had broken bones after shackling for slaughter. ${ }^{251}$

Different hen strains vary in their susceptibility to weak bones. ${ }^{252,253}$ Skeletal fragility is a production disease and is not found in the unselected lines ${ }^{254}$ or heritage breeds ${ }^{255}$ raised primarily on small farms. Researchers at the Roslin Institute have demonstrated that bone strength is moderately to strongly heritable; ${ }^{256,257}$ therefore, the problem of bone fractures could be solved by selectively breeding for enhanced bone strength, rather than productivity above all other traits.

## Other Injuries

Injuries to hens can occur in any system that is inadequately designed or in need of repair. Poor cage design and loose wires can trap hens and puncture and tear skin. Although newer cage designs reduce trapping incidence, cages in disrepair are still dangerous. Caged laying hens are more prone to overgrown claws due to lack of abrasive substrates that would naturally keep the claws short. Overgrown claws can become caught in cage wires and may tear and bleed. Abrasive strips made from a variety of different materials including ceramic plate, tungsten, and embossed metal can be added to cages to reduce claw growth. ${ }^{258}$

In cage-free systems, frightened birds may panic and rush to one side of an open barn. If they pile on top of one another, suffocation of the birds beneath can occur, ${ }^{259}$ though this is a relatively infrequent event, ${ }^{260}$ and precautions such as subdivision of the flock can prevent this event altogether.

## Conclusions on Health, Disease, and Injury

Although disease risks and bone fracture incidence are sometimes used to condemn cage-free production systems, when barn-raised hens are provided well-designed fixtures on perforated flooring or are otherwise separated from their manure in alternative systems, disease risks are comparable to hens in cages. Cage-free, deep-litter systems have disease risks similar to other types of poultry production methods that raise birds indoors on litter, such as broiler chickens, turkeys, and breeding flocks. Hens with outdoor access may be exposed to a greater variety of infectious agents, but low stocking density, fresh air, and sunlight are advantages for disease control that indoor housing systems do not provide. In all cases, good management is necessary to reduce potential disease risks.

As lack of exercise contributes to bone weakness in caged laying hens, even if genetic selection strategies to improve bone strength were implemented and bone strength was improved in the commercial laying hen population, caged hens could still suffer from bone weakness due to disuse osteoporosis. Animals are designed to move, are biologically prepared for regular movement, and will suffer physical consequences if they are not given the freedom to exercise. Hens should be biologically sound and healthy, and able to move freely and without risk of injury, as they were before commercial breeding practices pushed them toward their biological limit. The solution to this problem should be pursued by science and industry in conjunction with the move toward cage-free systems.

## Mortality

Although mortality in cage-free systems is at times claimed to be higher than in caged systems, research has found that mortality during the laying period is generally low and similar between all housing systems. ${ }^{261}$ Studies are beginning to reveal that differences in mortality between systems are not due to the housing system per se, but to management decisions, such as choice of hen strain and whether or not to beak-trim the birds. Indeed, husbandry practices and production methods are critical to hen welfare. In outdoor systems that do not protect hens from predators, for example, mortality can be excessive, ${ }^{262}$ but this is not typical, as it would be commercially unwise as well as inhumane to rear chickens outdoors without protection from predation. Similarly, mortality can be high in cage-free flocks with intact beaks ${ }^{263}$ if responsible management steps to minimize risk of injurious pecking are not taken, as outlined in detail above. In a systematic review of 14 different studies, in which beak-trimming status and hen strain were accounted for, mortality rate did not differ between cages and aviaries. Mortality can be reduced in cage-free systems by choosing a suitable hen strain, ${ }^{264}$
taking necessary steps to prevent feather-pecking and cannibalism, and by protecting free-range flocks from predators. ${ }^{265}$

## Stress

Several physiological correlates of stress can be measured and used as indicators of animal welfare. Corticosterone is a hormone in birds that increases in response to stressful situations, such as during handling for shackling at slaughter, ${ }^{266}$ and can be isolated and measured from blood or fecal samples. Another common method for measuring stress levels is to examine the ratio of heterophils to lymphocytes (two types of white blood cells involved in the avian immune response) in a blood sample. Heart rate may also be used as an indicator of stress.

A comprehensive analysis of the welfare of hens kept in various housing systems was undertaken by the LayWel research project, funded by the European Commission and several member countries of the European Union. A collaborative effort among working groups in seven different European countries that examined data collected from 230 different laying hen flocks, ${ }^{267}$ the LayWel project evaluated 16 independent experiments to study stress physiology. The researchers found that measures were highly inconsistent; depending on the physiological parameter measured, welfare assessment ran the full spectrum-from appearing to improve, compare to, or decrease in cages relative to alternative systems. ${ }^{268}$ These findings echo previous reviews. ${ }^{269}$

Given their results, the LayWel project team emphasized that physiological measurements of stress must be interpreted with caution. Using the results of one simple study of corticosterone or heterophil:lymphocyte ratio alone to draw conclusions about welfare can be misleading, as many factors can affect the stress response. For hens, these factors include the genetic makeup of the specific strain tested, the age of the hens, the episodic and irregular nature of corticosterone release, and the specifics of the stressor. ${ }^{270,271}$ Further, in some cases, corticosteroid measurements simply fail to accurately reflect stressful conditions. For example, while decreasing space allowance in cages consistently reduces productivity and increases mortality, there is no clear parallel affect on blood corticosterone levels. ${ }^{272}$

The LayWel project did find strong interactions between the physiological responses measured during the laying period and the rearing conditions of the hens. Thus, the environment during early development is important for adaptation of the hens to their future housing system and, consequently, to their welfare. Generally, stress is reduced when hens are reared in the same type of system they will be placed in during the laying period. ${ }^{273}$

## Productivity

Poor productivity can be used as an indicator of poor animal welfare, as growth and reproduction of animals can be reduced by stress or impaired health. Coping with stressful situations requires reallocation of bodily resources toward maintenance functions, diverting them from productive performance. ${ }^{274}$ However, the converse is not necessarily true. Nevertheless, productivity records are a ready source of information for egg producers. When morbidity, mortality, and stress levels are high in a group, resulting in a clear drop in productivity, this may be used as an indicator that welfare is compromised. ${ }^{275}$ However, this measure of welfare must be interpreted with caution: The connection between welfare and productivity is tenuous and unreliable; productivity is often measured in economic returns for whole flocks, whereby individual birds experiencing poor welfare are not assessed; and comparisons between systems can be misleading. ${ }^{276,271,278}$ Indeed, as hens are specifically bred for high rates of lay, their productivity will not necessarily fall when conditions are sub-optimal, ${ }^{279}$ and acute, transitory physical or mental suffering will not necessarily affect productivity. ${ }^{280}$ Further, high productivity is an underlying trigger for most metabolic disorders. ${ }^{281}$

While productivity in cage-free systems can be as high as battery-cage systems, ${ }^{282,283}$ feed conversion in cage systems is generally more efficient. That is, cage-free hens, who, unlike caged birds, are able to exercise, typically consume slightly more feed and therefore may have less efficient feed conversion ratios. ${ }^{28,285,286}$ However, lower productivity in cage-free systems does not indicate reduced welfare. Differences in productivity
and feed-conversion efficacy are due to a number of factors, including hen activity levels in cage-free systems (i.e., active hens consume more feed), feed wastage in alternative systems, greater temperature fluctuations experienced by free-range hens, and the fact that eggs that are lost (broken or eaten by hens) are not accounted for in productivity records for alternative systems. ${ }^{287,288,289}$ The underlying causes of reduced productivity in cage-free systems are not due to general differences in stress levels or health status of the birds.

## Conclusion

The animal welfare community seeks to raise the bar for the care and treatment of egg-laying hens, but there is an inherent limit on how high that bar can be set in a battery-cage environment. Indeed, it is impossible to provide for the behavioral well-being of a hen confined in a conventional battery cage, as she cannot lay her egg in a nest, perch, forage, dustbathe, scratch, freely stretch, engage in normal social behavior, explore her environment, hide, exercise, fly, jump, flap her wings, or even freely walk. Although all current commercial systems have welfare challenges, only cage-free systems provide for the behavioral freedom of the hen and have the potential to provide her with good physical well-being as well.

Due to the difficulties in weighing the many factors involved in assessing overall animal welfare, some scientific reviews have concluded that there are pros and cons to each housing system. For example, in its opinion on the "Welfare Aspects of Various Systems of Keeping Laying Hens," the Scientific Panel on Animal Health and Welfare identified the most severe threats to bird welfare in different production systems. For cages, these are 1) low bone strength and fractures sustained during depopulation, and 2) the inability to perform high priority behavior. For cage-free systems, the panel identified 1) bone fractures sustained during lay, 2) cannibalism, and 3) parasitic disease. ${ }^{290}$ However, in a clean, indoor, non-cage system with beak-trimmed birds, the only severe threat to welfare that remains is bone fractures sustained during lay. ${ }^{291}$ Although this is indeed a serious problem, selective breeding is likely to make significant improvements in future hen strains. ${ }^{292,293}$ The welfare potential of a given housing system is increasingly being seen as a more meaningful way of characterizing the various systems. The potential to solve welfare problems exists for cage-free systems, but behavioral restriction is impossible to address in a cage, as explained by poultry scientist Michael Appleby, member of the Farm Animal Welfare Council, an independent advisory body established by the U.K. government:

I find battery production to be one of the most inhumane practices in factory farming and have argued strongly for reform in the egg industry, both as an animal science professor and humane advocate, for many years.

Battery cages present inherent animal welfare problems, most notably by their small size and barren conditions. Hens are unable to engage in many of their natural behaviors and endure high levels of stress and frustration.

Cage-free egg production, while not perfect, does not entail such inherent animal welfare disadvantages and is a very good step in the right direction for the egg industry. ${ }^{294}$

It cannot be denied that there are real welfare risks associated with cage-free environments if management is poor. Market forces may drive producers to overcrowd birds, ${ }^{295}$ undermining some of the potential welfare improvements in alternative systems. However, where managers are committed to animal well-being, most of the welfare issues can be, and are being, worked out to realize the greater welfare potential of non-cage systems. For example, advances in disease control ${ }^{296}$ and genetic selection for reduced parasitism ${ }^{297}$ and cannibalism ${ }^{298,299,300}$ will undoubtedly improve the welfare of cage-free flocks. Further, information is available to assist cage-free producers in managing their flocks by a number of entities, including the National Sustainable Agriculture Information Service ${ }^{301}$ and the LayWel project. ${ }^{302}$ Although hen well-being in cage-free systems is subject to how well the system is managed, even a well-managed battery-cage system cannot provide good welfare as caged hens are so severely behaviorally restricted.

The best welfare for hens used for egg production is attained when they are raised in small groups with freedom of movement in complex environments with safe outdoor access. ${ }^{303}$ Indeed, small, well-managed flocks with
low stocking density experience reduced risk of disease transmission, low probability of cannibalism occurrence (thereby minimizing or eliminating beak-trimming procedures), a more natural group size, and more individual attention from caretakers. Using hardy, heritage breeds or sound crosses would further reduce the incidence of health problems, including weak bones and subsequent high fracture rates. In any case, management must be good to ensure that welfare potential of these systems is maximized.

There is a strong argument, firmly based on scientific grounds, that cages are not and can not be appropriate environments for laying hens. According to the LayWel project's authoritative and comprehensive review of all of the current science:

Conventional cages do not allow hens to fulfil behaviour priorities, preferences and needs for nesting, perching, foraging and dustbathing in particular. The severe spatial restriction also leads to disuse osteoporosis. We believe these disadvantages outweigh the advantages of reduced parasitism, good hygiene and simpler management. The advantages can be matched by other systems that also enable a much fuller expression of normal behaviour. A reason for this decision is the fact that every individual hen is affected for the duration of the laying period by behavioural restriction. Most other advantages and disadvantages are much less certain and seldom affect all individuals to a similar degree. ${ }^{304}$

The LayWel research team determined: "With the exception of conventional cages, we conclude that all systems have the potential to provide satisfactory welfare for laying hens."305

Many other scientists agree that welfare is generally compromised more in cages than it is in well-run alternative systems and that the differences between systems amount to a clear welfare advantage for hens who are not confined to cages. ${ }^{306,307,308}$ In 2008, after a 2.5 -year examination; the Pew Commission on Industrial Farm Animal Production, a project of The Pew Charitable Trusts and Johns Hopkins University Bloomberg School of Public Health, released a report based on technical information provided by leading academics. The report stated that the most intensive confinement systems used in animal agriculture, including battery cages for laying hens, constitute "inhumane treatment," and, among the final recommendations put forth by the 15 Commissioners was a complete phase out of battery cages. ${ }^{309}$

Yet, while science is indeed important, its usefulness in the debate about animal welfare has limits. Animal welfare judgments must also be based on ethical considerations and, in fact, are inextricably connected to them. ${ }^{310,311}$ The extent to which it is acceptable to use an animal is an ethical decision; science can provide factual information to inform the debate but cannot answer questions about morality. ${ }^{312}$ Further, while science has provided abundant factual information in many areas that affect animal welfare, other areas remain out of reach. The precise subjective states animals experience are still largely unknown to science. Until scientists can fully understand animals' minds, common sense, in combination with scientific facts, must be used to evaluate the effects an impoverished environment, such as a barren battery cage, might have on the psychological wellbeing of a confined animal. Where the science is incomplete, we must rely on common sense, good judgment, and a solid foundation of ethics, and provide the best possible environment for animals, erring on the side of the animals' perceived or actual best interest.

University Distinguished Professor of Animal Sciences, Biomedical Sciences, and Philosophy, Bernard E. Rollin, simply yet eloquently stated about laying hens: "Research has confirmed what common sense already knew-animals built to move must move., ${ }^{313}$

Egg producers cannot be held entirely accountable for the welfare problems of laying hens; economics have driven them to continually seek methods for minimizing costs. Competition between producers has led to increases in the number of birds per house and per cage, and attempts to reduce labor requirements. ${ }^{314}$ The decision to move to intensive production allowed producers to take advantage of economies of scale, but the animals have paid the added price. In the end, both science and ethics require that academics, consumers, retailers, advocacy groups, and industry work together to improve the welfare of egg-laying hens. Encouraging a move away from battery cage confinement systems works toward that end.
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The Humane Society of the United States is the nation's largest animal protection organizationbacked by 10 million Americans, or one of every 30. For more than a half-century, The HSUS has been fighting for the protection of all animals through advocacy, education, and hands-on programs. Celebrating animals and confronting cruelty. On the Web at humanesociety.org.

# Industrial Farm Animal Production in America 


and Johns Hopkins
Bloomberg School
of Public Health


A Report of the Pew
Commission on Industrial
Farm Animal Production

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Executive Summary

The Pew Commission on Industrial Farm Animal Production was established through a grant from The Pew Charitable Trusts to The Johns Hopkins Bloomberg School of Public Health to recommend solutions to the problems created by concentrated animal feeding operations in four primary areas: public health, the environment, animal welfare, and rural communities. The Commission heard approximately 54 hours of testimony from stakeholders and experts, received technical reports from academics from institutions across the country, and visited operations in Iowa, California, North Carolina, Arkansas, and Colorado, to gather information on each of the subject areas. In addition, each of the Commissioners brought his or her own unique experiences and expertise to bear during Commission deliberations.

Over the past 50 years, the production of farm animals for food has shifted from the traditional, extensive, decentralized family farm system to a more concentrated system with fewer producers, in which large numbers of animals are confined in eriormous operations. While we are raising approximately the same number of swine as we did in 1950, for example, we are doing so on significantly fewer, far larger farms, with dramatically fewer farm workers. This production model-sometimes called industrial farm animal production-is characterized by confining large numbers of animals of the same species in relatively small areas, generally in enclosed facilities that restrict movement. In many cases, the waste produced by the animals is eliminated through liquid systems and stored in open pit lagoons.

The ifap system, as it exists today, too often concentrates economic power in the hands of the large companies that process and sell the animal products,
instead of the individuals who raise the animals. In many cases, the "open market" for animal products has completely disappeared, giving the farmer only one buyer to sell to, and one price to be received.

In addition to raising animals in closer proximity, steps were taken to streamiline the process of raising animals for food, including standardized fee for rapid weight gain and uniformity; genetic selection to accentuate traits, sı as leanness, that create uniform meat products; and mechanization of feedin: watering, and other husbandry activities. This streamlined processing and standardization is typical of the evolution of industrial pursuits, and is intenc to be more economical by lowering the amount of input required to achieve a marketable product, as well as to ensure a uniform product. This process ir. food animal production has resulted in farms that are easier to run, with few and often less-highly-skilled employees, and a greater output of uniform anir products. However, there are unintended consequences of this type of anima production.

This transformation, and the associated social, economic, environmenta and public health problems engendered by it, have gone virtually unnoticed 1 many American citizens. Not long ago, the bulk of the fruit, grain, vegetable meat, and dairy products consumed by the American people were produced on small family farms. These farms once defined both the physical and the social character of the US countryside. However, the steady urbanization of the US population has resulted in an American populace that is increasingly disassociated from the production system that supplies its food. Despite the dramatic decline in family farms over the past 50 yeaR JiNanyAmericans, un
very recently, continued to think that their food still came from these small farms.

While increasing the speed of production, the intensive confinement production system creates a number of problems. These include contributing to the increase in the pool of antibiotic-resistant bacteria because of the overuse of antibiotics; air quality problems; the contamination of rivers, streams, and coastal waters with concentrated animal waste; animal welfare problems, mainly as a result of the extremely close quarters in which the animals are housed; and significant shifts in the social structure and economy of many farming regions throughout the country. It was on these areas that the Commission focused its attention.

Executive Summary

industrial food animal production (IFAP) is the growing public health threat of these types of facilities. In addition to the contribution of Ifap to the major threat of antimicrobial resistance (Smith et al., 2002; Smith et al., 2007), IFAP facilities can be harmful to workers, neighbors, and even those living far from the facilities through air and water pollution, and via the spread of disease. Workers in and neighbors of IfAP facilities experience high levels of respiratory problems, including asthma (Donham and Gustafson, 1982; Donham et al., 1989; Donham et al., 1995; Donham et al., 1985a; Donham et al., 2007;

Merchant et al., 2005; Mirabelli et al., 2006a; Mirabelli et al., 2006b;
Sigurdarson and Kline, 2006; Thu, 2002). In addition, workers can serve as a bridging population, transmitting animal-borne diseases to a wider population (Myers et al., 2006; Saenz et al., 2006). A lack of appropriate treatment of enormous amounts of waste may result in contamination of nearby waters with harmful levels of nutrients and toxins, as well as bacteria, fungi, and viruses (Nolan and Hitt, 2006; Peak et al., 2007), all of which can affect the health of people both near and far from IFAP facilities.

Antibiotics are one type of antimicrobial. Antimicrobials are substances that kill bacteria or suppress their multiplication or growth, and include antibiotics, some minerals, metals, and synthetic agents.

The use of antibiotics for growth promotion began with the poultry industry in the 1940s when it discovered that the use of tetracycline-fermentation byproducts resulted in improved growth (Stokstad, 1954; Stokstad and Jukes, 1958-1959). Since then, the practice of adding low levels of antibiotics and growth hormones to stimulate growth and improve production and performance parameters has been common among IFA.P operations for all species. Because any use of antibiotics results in resistance, this widespread use of low-level antibiotics in animals, along with use in treating humans, contributes to the growing pool of antimicrobial resistance in the environment.

The threat from antimicrobial resistance became more apparent in the 1990s as the number of cases of drugresistant infections increased in humans. A World Health Organization (wrio) Report on Infectious Diseases published in 2000 expressed alarm at the spread of multi-drug-resistant infectious disease agents, and pointed to food as a major source of antimicrobial-resistant bacteria. Since the discovery of the growth-promoting and disease-
fighting capabilities of antibiotics, farmers, fish-farmers, and livestock producers have used antimicrobials. This ongoing and often low-level dosing for disease prevention and growth inevitably results in the development of resistance in bacteria in or near livestock because a selective pressure that does not kill fosters resistance (who, 2000).

While it is difficult to measure what percent of resistant infections in humans are caused by antimicrobial use in agriculture as opposed to other settings, it can be assumed that the wider the use of antimicrobials, the greater the chance for the development of resistance. Reports on the amount of antibiotics used in animals range from 17.8 to 24.6 million pounds per year. The Union of Concerned Scientists estimates that $70 \%$ of the antibiotics used in the United States annually are used in farm animals (Mellon et al., 200r).

As the amount of antimicrobials present in the general environmental pool becomes greater, so too does the chance of resistance developing within many different bacterial populations. This is due, in part, to the way resistance is spread between capable bacteria. For example, many bacteria live in the human digestive tract or on human skin. These are not normally harmful (and are often helpful). However, these harmless bacteria may still


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harmful, or could then become harmful.
Feed formulation further influences risks because the feeds supplied to confined animal populations are significantly different from the foraged feeds traditionally available to poultry, swine, or cattle.
ifar not only causes concerns abour the health of the animals present, but the basic production model creates concerns with respect to human heaith, as well. Health risks are a function of exposure, with those engaged directly in livestock production typically having more frequent and more concentrated exposures to chemical or infectious agents, and others, such as those involved in support services, having lower rates of exposure. Health risks may extend far from the xfar facility, however. Groundwater contamination, for example, can extend throughout the aquifer, affecting drinking water supplies far from the source of contamination. Infectious agents arising in IFAP facilities may be transmissible from person to person in a community setting and well beyond. An infectious agent that originates at an rpap facility may persist through meat processing and contaminate a consumer meat product, resulting in a serious disease far from the rfar facility.

Agricultural workers may serve as a bridging population between their communities and animal confinement facilities. Because it is categorized as an agricultural process, IFAP is largely exempt from state and federal industrial exposure monitoring, inspection, injury-disease reporting, and surveillance. Without monitoring, it is extremely difficult for public health officials to reduce the occupational health risk associated with rfar.

The toxic gases and organic dusts associated with Ifap facilities have the potential to produce upper respiratory irritation in confinement facility workers. The emissions from confinement facilities, however, may affect communities proximate to those facilities, as well as populations far away from these operations. In particular, the elderly, those with compromised respiratory systems or chronic conditions that limit their mobility, and children are at most risk of asthma and other respiratory illnesses. Depression and other symptoms have also been attributed to emissions from such facilities (Schiffman et al., 1995).

Executive Summary
Eivironment

## stems from the tremendous quantities of animal waste that are concentrated

in and around Ifar facilities. Animal waste in such volumes may exceed the
capacity of the land to absorb the nutrients and attenuate pathogens. Thus,

## what could be a valuable byproduct becomes a waste that must be disposed

of in an appropriate manner.

In addition, many ifar facilities have not been sited in areas that are best able to cope with these enormous amounts of nutrients and pathogens. Many are found in vulnerable locations, such as on flood plains or close to communities that utilize well water.

The annual production of manure produced by animal confinement facilities exceeds that produced by humans by at least three times (EPA, 2007). Manure in such large quantities carries excess nutrients, chemicals, and microorganisms that find their way into waterways, lakes, groundwater, soils, and airways. Excess and inappropriate land application of untreated animal waste on cropland contributes to excessive nutrient loading and, ultimately, eutrophication of surface waters.

IFAP runoff also carries antibiotics and hormones, pesticides, and heavy metals. Pesticides are used to control insect infestations and fungal growth. Heavy metals, especially zinc and copper, are added as micronutrients to the animal diet. Tylosin, a widely used ancibiotic (macrolide) for disease treatment and growth promotion in swine, beef cattle, and poultry production, is an example of a veterinary pharmaceutical that decays rapidly in the environment, but can still be found in surface waters of agricultural watersheds (Song et al., 2007).

Air quality degradation is another problem in and around IFAP facilities, due to localized releases of toxic gases, odorous substances, particulates, and bioaerosols containing a variety of microorganisms and human pathogens (Merchant et al., 2008).

Other environmental issues associated with Ifap include high levels of resource use. IfAP requires a large amount of water for irrigation of animal feed crops, as well as cleaning of many buildings and waste management systems. Much of this water comes from finite groundwater sources that recharge slowly or not at all, and are in demand for human needs. Greenhouse gas emissions from all livestock operations, including ifar facilities, account for 18 percent of all human-caused greenhouse gas emissions, exceeding the emissions caused from the transportation sector (Steinfeld et al., 2006). Greenhouse gases, primarily methane, carbon dioxide, and nitrous oxide, are produced by the animals during the digestion process in the gut. Additional emissions result from degradation processes occurring in uncovered waste lagoons and digesters.

IPAP, as practiced today, is also extremely energy intensive and requires disproportionately large inputs of fossil fuels, industrial fertilizers, and other synthetic chemicals. For example, the ratio of fossil fuel energy inputs per unit of food energy produced averages 3 : I for all US agricultural products combined. For industrially produced meat products, the ratio can be as high as $35: 1$ (beef produced in feedlots generally has a particularly unfavorable energy balance) (Horrigan et al., 2002).

In the ifar system, each individual farm animal requires less feed, produces less manure, and reaches market weight far faster than farm animals produced on the small family farm of 50 years ago, which might suggest a lesser impact on the environment. Yet Ifap stands in sharp contrast to the more pastoral animal farming methods it has replaced by virtue of the emphasis placed on producing large numbers of animals in close confinement, as rapidly and as cheaply as possible. Until IfAR, agricultural practice and animal husbandry evolved over more than ro,000 years, and proved to be more or less sustainable as measured by the agricultural inputs and outputs and ecosystem health. ifap systems, on the other hand, are a recent development, dating back approximately 50 years. Rather than seeking a balance between the natural productivity of the land to produce crops to feed animals and absorb wastes produced by those animals, the industrial model concentrates on growing animals as units of protein production. Inputs of feed and feed additives containing antimicrobials ensure that the animals make it to market weight in the shortest period of time possible. Both animals and their waste are concentrated and usually exceed the capaciry of the land to produce feed or absorb the waste. Consequently, the rapid ascendance of ifap has produced an expanding array of deleterious environmental effects on local and regional water, air, and soil resources.

The Commission's recommendations include focusing on appropriate regulation of IEAP facilities in order to prevent further degradation of air, water, and soils, and to minimize the impact on adjacent communities.



Lagoon waste management system for a 900-head hog farm in Georgia.

Excutive Summary
Animal Welfare

## just what constitutes a decent life for animals and what kind of life we owe the

 animals in our care. Physical health as measured by absence of some diseases or predation, for example, may be enhanced through confinement since the animals may not be exposed to certain infectious diseases or sources of injury that would be encountered if the animals were raised outside of confinement. It is clear, however, that good animal welfare can no longer be assumed based only on productivity or the absence of disease. The Commission looked at the issue of animal welfare from both a scientific and an ethical point of view.The intensive confinement practices that are common in IFAP so severely restrict movement and natural behaviors that the animal may not be able to turn around or walk at all. Gestation and restrictive farrowing crates for sows and battery cages for laying hens are examples of this type of intensive confinemenr. The stress that results from these situations can result in animals that are more susceptible to disease and more likely to spread disease (Barham et al., 2002; Jones et al., 2001; Kanitz et al., 2002; Losinger and Heinrichs, 1997; Silbergeld et al., 2008). In addition, extremely large group size in an extremely confined area, such as may be seen in broiler houses, can cause the same types of problems. There are alternatives to these types of production systems, including "cagefree" systems for laying hens, and hoop barns, pens and several less restrictive farrowing systems for hogs. These alternatives can also attenuate many of the health and environmental problems caused by ifar by naturally spreading the manure over the land in manageable amounts and lessening the animal's susceptibility to disease (and therefore the need for much antibiotic use).

Increasing public awareness of the conditions prevalent in confinement agriculture has led to increased consumer demand for changes in treatment. In anticipation of potentially stronger measures imposed through the regulatory process, the food animal industry has begun to adopt minimum standards of animal treatment codified in voluntary standards that are widely published. In some cases, a third party certifies them. Such standards, however, rarely address the larger concerns for animal well-being relating to freedom of movement and humane treatment in confinement systems and slaughter.

Confinement animals are generally raised indoors and, in some cases (e.g., poultry, laying hens, hogs), the group size when raised indoors is larger than the group size when raised outdoors. In other cases (e.g., veal crates or gestation crates for sows), animals are separated and confined to spaces that provide for only minimal movement. The fundamental welfare concern is the ability of the animal to express natural behaviors: rooting and social behavior for hogs, walking or lying on natural materials, and enough
floor space to move around with some freedom at the minimum. Gestation crates, the most restrictive farrowing crates, battery cages, and ocher intensive confinement systems fail to allow for even these minimal natural behaviors.

Recently, animal scientists in Europe published a set of standards to define basic animal welfare measures. These include five major categories, which must be taken in their entirety: feeding regimens that ensure that animals do not experience prolonged hunger or thirst; housing that ensures resting comfort, a good thermal environment, and freedom of movement; health management that prevents physical injury, disease, and pain; and appropriate means to allow animals to express non-harmful social behaviors, and orher, species-specific natural behaviors (European Union Animal Welfare Quality Program: http://www. welfarequality.net/everyone/36059)(FAwC, 2007). The animal industry has resisted codifying these standards as common practice for fear of adding new costs to animal production processes.

The Commission believes that ethical treatment of animals raised for food is essential to, and consistent with, achieving a safe and sustainable system for producing food animals. Practices that restrict natural motion, such as sow gestation crates, induce high levels of stress in the animals and threaten their health, which in turn may threaten human health. There is growing public concern for ethical treatment of farm animals that will lead to new laws and regulations governing farm animal treatment unless the industry voluntarily adopts third-party, consensus-based standards for animal well-being. The recommendations made by the Commission are intended to define ethical treatment of animals and what constitutes a decent life for food animals.
 industrialized hog production (Durrenberger and Thu, 1996).

The industrialization of American agriculture has transformed the character of agriculture itself and, in so doing, the face of rural America. The family-owned farm producing a diverse mix of crops and food animals is largely gone as an economic entity, replaced by everlarger industrial farms producing just one animal species or growing just one crop, and rural communities have fared poorly. Industrialization has been accompanied by increasing farm size and gross farm sales, lower family income, higher poverty rates, lower retail sales, lower housing quality, and lower wages for farm workers.

As the food animal industry shifted to a system with a reduced number of companies for livestock producers to sell to, as well as one controlled by production contracts, economic power shifted from farmers to livestock processors. Farmers relinquished their once-autonomous animal husbandry decision-making authority in exchange for contracts that provide assured payment but require substantial capital investment. Once the commitment is made to such capital investment, many farmers have no choice but to continue to produce until the loan is paid off. Such contracts make it nearly impossible for there to be open and competitive markets for most hog and poultry producers, who must enter into contracts with the so-called integrators (meat packing companies) if they are to sell their product.

Although the proponents of the industrialization of livestock agriculture point to the increased economic efficiency of IFAP operations, the Commission is concerned that the benefits may not accrue in the same way to the rural communities where these operations exist. The Commission's technical report on economics in swine production showed that the current method of intensive swine production is only economically efficient due to the externalization of costs associated with waste management. In fact, industrialization leading to corporate ownership actually draws investment and wealth from the communities in which specific trap facilities are located (Abeles-Ailison and Connor, 1990).

Merely tweaking our mono-culture confinement farm animal production methods is not likely to reverse
the negative impacts on public health, environment, animal welfare, and rural America. At the same time, the Commission believes that there are practical solutions to these problems that can start immediately that will ensure that the productivity of farm animal production can be maintained well into the future. Recommendations address criteria for proper siting of ifap facilities, increasing market competition, and fairness in production contracts in an effort to improve life in rural America. The Commission does not believe that the nation's demand for food can be met by turning back the clock to the i95os. At the same time, there is much that can be done to address the problems that industrialization of agriculture has brought. The system of the furure may be a mix of small and medium-sized extensive operations as well as large, more humane, sustainable intensive operations such as hoop barns in swine production and intensive rotational grazing in beef production.

There is increasing urgency to chart a new course. Our energy, water, and climate resources are undergoing dramatic changes that, in the judgment of the Commissioners, will require agriculture to transition to much more biologically diverse systems, organized into biological synergies that exchange energy, improve soil quality, and conserve water and other resources.

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$\qquad$ Small farm in Kremmling， Colorado




## Executive Summary

Recommendations of the
Commission

Ifap systems are largely unregulated, and many practices common to this method of production threaten public health, the environment, animal health and well-being, and rural communities. The use of antibiotics in animals without a diagnosed illness, the mismanagement of the large volumes of farm waste, and the treatment of animals in intensive operations are all of deep concern. The Commission's six primary recommendations address these concerns.

## Phase Out and Then Ban the Nontherapeutic Use of Antimicrobials

The use of antibiotics and other antimicrobials as growth promoters and in the absence of a diagnosed illness in industrial animal operations is a common practice. In 1998, the National Academies of Science (Nas) estimated that antibiotic-resistant bacteria increased health care costs by a minimum of $\$ 5$ billion annually, or approximately $\$ 13$ per person, per year ( $\mathrm{tom}, \mathrm{x998}$ ). The next year, the NAS estimated that eliminating all antimicrobials as feed additives wouid cost each American consumer less than \$Io per year (NAS, 1999).

The Commission recommends phasing out and then banning the non-therapeutic use of antimicrobials in food animal production. The Commission defines nontherapeutic as any use of antimicrobials in food animals in the absence of clinical disease or documented disease exposure.

The Commission recommends that the first step in this process should be an immediate ban on any new approval of antimicrobials for non-therapeutic uses in food animals and retroactive investigation of antimicrobials previously approved.

## Improve Disease Monitoring and Tracking

A voluntary animal tracking system, called the National Animal Identification System (NaIs), has been implemented by the Animal Plant and Health Inspection Service (Aphis) of the United States Department of Agriculture. The goal of the nais voluntary system is a 48-hour track back to identify exposures, since that time frame is vital to containing the spread of infection (USDA and APHis, 2006).

The first two phases of the Nars are the registration of premises and individual animals or units of animals using a US Animal Idenitification Number (USAIN) (USDA, 2005). According to the USDA, the USAIN will evolve into the sole national numbering system for the official identification of individual animals in the United States. The Commission views animal identification as an important public health issue. The need for a rapid, accurate trace back system to protect public health in the event of a disease ourbreak is critical.

The Commission recommends the implementation of a disease monitoring program for food animals with a 48 -hour track back of those animals at every stage of production in a fully integrated and robust database. A mandatory premise and individual animal or lot registration should be in effect by 2009, with an animal tracing capability in place by 20xo. The tracking system should follow food animals from birth to consumption, including movement, illness, breeding, feeding practices implemented, slaughter condition and location, and point of sale.

Federal agency oversight of all aspects of this tracking system with stringent protections from lawsuits for producers is needed. Special funding allocated to small farms to facilitate their participation in the national tracing system is vital.

## Improve IFAP Regulation

Waste from IFAP operations contains both desirable and undesirable byproducts. Farm waste can be a soilenriching nutrient when applied in the correct amount and with the right method. But undesirable components of animal waste include pathogenic organisms, antibiotic-resistant bacteria, viruses, industrial chemicals, and heavy metals.

As ifar facilities have become more concentrated in specific geographic areas around the country, dealing with waste issues has become critical. New regulations must address zoning and siting of frap facilities with particular consideration of topography, climate, and population density of a proposed region. New ifar laws and regulations must mandate development of sustainable waste handling and treatment systems that can utilize the beneficial components, but render the less desirable components benign.

The Commission recommends that Ifap be regulated as rigorously as other industrial operations, and that a new system of laws and regulations for dealing with farm waste replace the inflexible, patchwork, and broken systems that exist today. Congress and the federal government should work together to formulate laws and regulations outlining baseline waste handling standards for IFAP facilities. These standards would address the minimum level of mandatory ifar facility regulation and would outline what IFAP regulations states must carry out to prevent pollution and to protect public health and the environment.

## Phase Out Intensive Confinement

Animals that are raised for human consumption, even under the best of circumstances, are subject to treatment at some point during their lives that causes them pain. Over the past 50 years, there has been a gradual movement
systems to more intensive, confined systems. Not all of the systems that employ such practices are classified as "CAFO" $s$, as intensive confinement can occur in facilities that are not big enough to be classified in that manner. Although the result of this change has been improved speed of production, conditions in many facilities are particularly harsh and stressful, and in many cases may cause undue suffering throughout much of an animal's entire life.

Unbeknownst to most Americans, no federal regulations protect animals while on the farm. The Humane Methods of Slaughter Act was enacted to ensure that animals are rendered "insensible to pain" before slaughter, but poultry are not included under its protectior despite the fact that more than 95 percent of the land animals killed for food in this country are birds.

Industry standards for production systems and animal care are generally guided by economics. Welfare issues, such as animal stress and suffering, might be considered in rearing, but only in the context of how they impact performance, efficiency, or profitability. Industrial livestock production systems have often deleteriously affected the welfare of virtually every species of farm animal in the United States, [including all forms of .poultry (chickens, turkeys, ducks, and geese), dairy cows, veal calves, swine, sheep, and lambs], and raise serious ethical questions regarding the way in which these animals are treated.

The Commission recommends the phase-out, within ten years, of all intensive confinement systems that restrict natural movement and normal behaviors, including swine gestation crates, restrictive swine farrowing crates, cages used to house multiple egg-laying chickens, commonly referred to as battery cages, and the tethering or individual housing of calves for the production of white veal. In addition, the Commission recommends the end to force-feeding of fowl to produce foie gras, tail docking of dairy cattle, and forced molting of laying hens by feed removal. Due to the capital investment in these intensive confinement systems by many contract producers, particularly in swine production, the Commission recommends targeted assistance be made available to contract producers to facilitate the conversion from intensive confinement systems, either through accelerated depreciation or some ocher mechanism.

## Increase Competition in the Livestock Market

The transformation of rural sociery and the farm economy in many agricultural regions of the country over the past three or four decades has been profound. With the increasing consolidation of agricuiture, including livestock production, and the transition to ever larger units of production, small to mid-size family farms in which agricultural activities account for the bulk of family income have rapidly disappeared throughout the nation. Each year, the number of people engaged in agriculture in America grows smaller. What was once a richly textured way of life supported by countless small town businesses and a corresponding network of health, education, and social services that were once prevalent throughout many rural areas, has been dramatically altered. Quite literally, rural life in many parts of the nation has withered, leaving once thriving farm communities with an increasingly ghostlike appearance.

There are multiple factors behind the changing face of rural American society, the rise of industrialized agriculture being only one. However, the increasing concentration and integration of the livestock production process from breeding and insemination to slaughter, processing, and the distribution and sale of meat and dairy products raises issues associated with competiive fairness and economic life in rural areas that continue to spark passionate debate throughout rural America, and which are the subject of increasing rancor and confrontation.

The Commission believes that vigorous market competition is of vital importance to consumers and the overall health of the American economy. The nation benefits from an open, comperitive, and fair market where the values of democracy, freedom, transparency, and efficiency are in balance.

The Commission recommends the vigorous enforcement of current federal antitrust laws to restore competition in the farm animal market. If enforcing existing anti-trust laws is not effective in restoring competition, further legislative remedies should be considered, such as more transparency in price reporting and limiting the ability of integrators to control the supply of animals for slaughter.

## Improve Research in Animal Agriculture

rear can have a dramatic impact on health, on the environment, and certainly on the lives of the animals themselves. As the Commission traveled across the country, meeting with experts in animal agriculture, the general public, and stakeholders, it heard the recurring theme of the need for independently funded research. The strongest comments came from the academic research community.

The three main areas of concern were:

- The lack of public funding for research into IfAP issues.
- The increase in research funding by members of the animal agriculture industry.
- The lack of transparency in funding sources in much agricultural research.

With declining public research dollars; investigators turn to other funding sources. Increasingly, those sources are the giant multinational agricultural companies that have a vested interest in positive findings. Certainly, companies may want to fund research to help them improve their business, but if such funding is the major source for research, that funding source should be reported. The same may be said if an advocacy organization is the majority funder.

This transparency is particularly important with university extension programs. These programs are the "on the ground" location where research is "translated" into practice. Often, a farmer may be told that something is "best", without any awareness of who funded the research that backs that statement. They may then employ, in good faith, a practice that is not "best," but instead contributes to the environmental, public heaith, animal welfare, and community issues.

Increasing public research dollars into ifar should be a major focus, since this form of animal agriculture impacts so many aspects of life. The Commission's effort to gather unbiased information was affected by the industry's undue influence on academic researchers. It is extremely unfortunate that this is the case, because with appropriate independent funding, science may be able to solve many of the problems resulting from Ifar.



## Conclusion

Through public testimony from stakeholders, site visirs, presentations from experts, technical reports, and the experience and expertise of the Commissioners themselves, the Commission has compiled these recommendations (as well as the more detailed recommendations found in the full report) for improving the sustainability of animal agriculture into the future. The Commission firmly believes that many of the problems associated with IFAP are unintentional, but that does not mitigate the need to move forward in a positive direction. Failure to address these issues will only result in a further lack of confidence in the animal agriculture industry, increased environmental damage, worsening public healch, dismal animal welfare, and a grave outlook for rural communities. In this age of increased awareness of the need for economically and environmentally sustainable endeavors, animal agriculture cannot be left behind. The Commission applauds the efforts of many enterprises toward this goal and is certain that a better system is around the corner. The recommendations of the Commission provide examples of steps that should be taken to achieve this larger goal.
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Final Pieport
Acknowledgments reflects the deliberations and consensus recommendations of the Commission.

## PCIFAP Commissioners

Brother David Andrews, csc, jD Coordinator for Peace and Justice of the Congregation of Holy Cross
Former Executive Director National Catholic Rural Life Conference

John Carlin, Chair
Executive-in-residence
Kansas State University
former Archivist of the United States (2995-2005)
former Governor of Kansas (1979-1987)

Michael Blackwell, DVM, MPH,
Assistant Surgeon General, usphs (ret.)
President and ceo
Blackwell Consulting, lic
Fedele Bauccio, MbA
Co-founder and ceo
Bon Appétit Management Company
Tom Dempster
State Senator, South Dakota

Dan Glickman, JD
Former US Secretary of Agriculture
Chairman and ceo
Mocion Picture Association of America

Alan M. Goldberg, phD
Professor
Johns Hopkins Bloomberg School of Public Health

John Hatch, DrPH
Kenan Professor Emeritus
University of Norch Carolina at
Chapel Hill
School of Public Health

Frederick Kirschenmann, PhD Distinguished Fellow Leopold Center for Sustainable Agriculture
Iowa State University

James Merchant, MD, DrPH
Dean.
University of Iowa College of Public Health

Marion Neste, PhD, MPH
Paulette Goddard Professor
Deparment of Nutrition,
Food Studies, and Public Health
New York University
Bill Niman
Cattle Rancher and Founder of Niman Ranch, Inc.

Bernard Rollin, Pho
Distinguished Professor of Philosophy
Colorado State University
Mary Wilson, MD
Associate Professor
Harvard School of Public Health
Associate Clinical Professor of Medicine
Harvard Medical School
This report is supported by a grant from The Pew Charitable Trusts. The opinions expressed are those of the pCifap and do not necessarily reflect the views of The Pew Charitable Trusts.

## PCIFAP Staff

Robert P. Martin
Executive Director

Emily A. McVey, pho
Science Director

Paul Wolfe
Policy Analyst
Ralph Loglisci
Communications Director

Lisa Bertelson
Research Associate

The Commission gratefully acknowledges the contribution of Dr. Amira Roess during her tenure with the Commission.

## PCIFAP Consultants

Jeffrey T. Olson
Final Report Author/Editor
Michelle Pilliod
Pilliod Meeting Planning, Inc.
Cameron Fletcher
Copy Editor

## Jamie Shor

Venture Communications

## Al Quinlan

Greenberg, Quinlan, Rosner Research

Micheile Snowman
Blattner Brunner
Toren Carrer
Blattner Brunner

Dan Jackson
Cattle Rancher


## Bill seeks to crack egg competition

Law would impose Prop. 2 rules on out-of-state eggs

## Wes Sander

Capital Press
Thursday, May 14, 2009

With voters having imposed cage-size restrictions on Califomia egg producers, lawmakers want to impose the same rules on out-of-state producers.
Proposition 2, approved overwhelmingly by voters in November, prohibits farmers from keeping chickens, pigs and veal calves in tight confinement.
AB1437, introduced by Assemblyman Jared Huffman, De-San Rafael, would impose the same rules on on out-of-state producers who sell eggs to California. The b co-authored by Sen. Dean Florez, D-Shafter, and Assemblyman Tom Berryhill, R-Modesto.

The bill was recommended for passage on the agenda of the Assembly Appropriations committee on Wednesday.
The bill is moving through the Legislature despite an Assembly committee analysis that questioned whether the measure would violate the U.S. Constitution's Commerce Clause. Article I, Section 8, Clause 3 of the Constitution gives Congress the power to regulate commerce "among the several states."

Prop. 2, applies mostly to the state's egg industry, would impose criminal penalties upon implementation in 2015. The rules under AB1437 would likewise take effer 2015.

In-state producers have said they're neutral on the bill, which is intended to keep California producers competitive with producers in other states.
On May 11, the state's egg producers announced the formation of a new advocacy group, the Association of California Egg Farmers. The association says its first $t$ is interpreting Prop. 2.
"Califomia egg farmers respect the voters' decision and want to comply with Proposition 2," said Debbie Murdock, executive director of the new organization. "But $t$ t initiative's language is so vague that producers don't know what they need to do to meet the new mandates and avoid jail sentences."

Staff writer Wes Sander is based in Sacramento. E-mail: wsander@capitalpress.com.

## Related Links

[^3]Case 2:14-cv-00341-KJM-KJN Document 37 Filed 04/09/14 Page 103 of 154

## Farmers: Who's watching the henhouse?

Producers want to comply with Prop. 2 but are unsure
how to proceed

## By CECILIA PARSONS

 Capital PressFiguring out how to comply with Proposition 2's mandates is the first challenge for the newly formed Association of California Egg Farmers.

Proposition 2, passed by 7.5 million California voters, is also known as the Prevention of Farm Animal Cruelty Act. It includes housing requirements for veal calves and pigs, but was aimed primarily at the state's 19 million egglaying hens. The act does not
include exact measurements for housing space that must be provided for each hen, but mandates that hens must be able to spread their wings without touching the cage or another chicken.

The association, announced May 11, will be an advocate on state policies that affect the state's egg industry.

Since the passage of Prop. 2 last November, the state's egg producers have raised plenty of questions about what they'll need to do to comply with the new law for housing hens. Without some idea of how to proceed with changes in hen housing, producers can't begin to work with lenders or even calculate their return on investment, said ACEF spokeswoman Fiona Hutton

A massive campaign to defeat Proposition 2 was waged by the egg industry and related business interests to persuade California voters that the law would raise the price of eggs, ruin the California egg industry, and force consumers to buy eggs from states and countries that lack California's food-safety standards.

Debbie Murdock, executive director of the new association, said criminal penalties for non-compliance concerns producers. She said without clear standards or guidelines for determining the amount of space hens need to meet the new mandate, no one knows how much more land is needed. It is not even clear if cagefree enclosures currently are in compliance, she said.

Producers aren't even sure which state agency is in charge of enforcing the measure.

Gary Foster, manager of Norco Ranch, one of the state's largest egg producers, said the law is outside of the state agriculture code, and the California Department of Food and Agriculture has declared Prop. 2 rules are outside of its purview.
"Which agency is responsible for defining legal housing?" asked Foster.
The néw law does not say how, or if, egg producers can modify existing housing to meet the new rules. Murdock said that ACEF would seek clarification so producers can proceed.
"California's egg farmers respect the voters' decision and want to comply with Propo-
sition 2, but the initiative's language is so vague that producers don't know what they need to do to meet the new mandates and avoid jail sentences," said Murdock.

Foster said the measure's 2015 deadline is not far off considering the length of time it takes to obtain building permits.

Paul Shapiro, senior direcor for the Factory Farming campaign for the Human Society of the United States, said in an e-mail that there are no cages in commercial use that offer birds sufficient space to be in compliance with the Prevention of Farm Animal Cruelty Act. However, all cagefree egg production systems do offer sufficient space to be in compliance.

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## DIRECTORS

Leste Let Aexander Era
Fatrkia tores Asp
Pate A Eender
Gitc L Sematal, Esq.
Hathar xater
Anita W, Suppe, Es,
Nall 5 , Farg. Esq. C.MA.

Kathon M, Lluchar, E59

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 Jomet. tin and ferslaw what Dredo. Whemen M.

April 24, 2009

Assemblymember Jared Huffman<br>State Capitol<br>Sacramento, CA 95814

## RE: AB 1437 - SUPPORT

Dear Assemblymember Huffman:
On behalf of The Humane Society of the United States and our more than 1.2 million California constituents, $I$ am writing to offer support for AB 1437, which would require all shelled eggs sold in Califormia to meet the animal care standards set forth in the Prevention of Farm Animal Cruelty Act.

The Center for Food Safety has stated that extreme intensive confinement of egg-laying hens can have potentially serious public health and food safety implications. Further, the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment states that reducing flock prevalence results in a direct proportional reduction in human health risk. Egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and poor conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.

The cruelty associated with the confinement of egg-laying hens in "battery cages has been deemed unacceptable by California voters. In November 2008, Californians overwhelmingly supported Proposition 2 by a 63.5 percent margin. Prop 2 was favored by voters in 47 of California's 58 counties and received more "yes" votes than any other citizen initiative in California history.

Economists have estimated that it costs producers less than one penny per egg more to raise hens in "cage-free" barns than it does to raise them in the tight, confining cages that have been outlawed by adoption of the Prevention of Farm Animal Cruelty Act.

Please add The Humane Society of the United States to the list of AB 1437's supporters. Please do not hesitate to contact me with any questions or comments at (916) 992-3667 or ifearing@humanesociety.org.

Sincerely,


April 23, 2009

The Honorable Cathleen Galgiani<br>Chair

Assembly Committee on Agriculture
1020 N Street
Room 362
Sacramento, CA 95814

## Dear Chairwoman Galgiani,

On behalf of the humane farming association's 225,000 members, I am writing to respectfully urge you to SUPPORT A.B. 1437, a bill introduced by Assemblyman Jared Huffman. A.B. 1437 would require that all shelled eggs sold in California as of January 1,2015 be in compliance with the basic animal care standards set forth in the Prevention of Farm Animal Cruelty Act, which was approved by voters in November 2008 by a 63.5 percent margin. (Proposition 2 was favored by voters in 47 of California's 58 counties and received more YES votes than any other citizen initiative in California history.)

The cruelty associated with battery cage egg production has been deemed unacceptable by voters in California. According to the egg industry's economist, it costs producers less than a penny per egg to raise hens in a cage-free environment versus confining them in cramped battery cages that are now being phased out by adoption of the Prevention of Farm Animal Cruelty Act.

For these reasons, I respectfully request that you vote YES on A.B. 1437 when it comes up for your consideration.

Thank you very much.

Sincerely,

# Assemblymember Kathleen Galgiani 

## Support for AB 1437 (Huffman) Shelled Eggs and Animal Care Standards

## Dear Honorable Galgiani,

Sierra Club California suppotts AB 1437 (Huftman) which would require all shelled eggs sold in Califormia after January l, 2015 to meet the animal care standards set forth in Proposition 2 (Prop 2), the Prevention of Fam Animal Cruelty Act.

We supported passage of Prop. 2 which was passed by the voters in November 2008. Sierra Club Califormia also is very supportive of measures that protecr public health by minimizing exposure to health risks and consider them to be a preferable to measures that try to mitigate for exposures after they have happened. AB' 1437, by requiring eggs sold in Callfornia to come from hens kept in conditions that are more favorable to their own health, will better ensure public safety as facilities move to be in compliance those standards.

Reports by a range of entities (including the World Health Organization, the Pew Commission) confirm that healthier and more humane conditions for food arrimals can reduce the risk of exposure to foodbome pathogens. The marginal increased cost for the more humane conditions is worth every penny to Califormians.

Sierra Club Califomia urges your "Aye" vote for AB 1437.
Sincerely,


Michael Endicott
Sieira Club Califomia
c. Committee members

Assemblymember Huffman



April $14^{\text {th }}, 2009$
The Honorable Jared Huffman

## Support: AB 1473 (Huffman)

California State Assembly
State Capitol, Sacramento,
CA 95814
Dear Assemblyman Huffman:

On Sunday April $5^{\text {th }}$, the Board of Directors of the League of Humane Voters, of behalf of its volunteers, voted to endorse AB 1473 (Huffman). Although this is an attempt to give the egg industry a level playing field in Califomia it should also contribute to an improvement in the lives of millions of laying hems. We are grateful for your authorship of this bill which should encourage the egg industry to improve conditions for the animals under their control all over the country.

Please let us know if we can be of any help in assuring that this legislation is signed into law.

Sincerely,

Rich Mc Lellan MD
Director,
League of Humane Voters, California Chapter


## California Animal Association

April 8, 2009

Assemblymember Jared Huffman
State Capitol
Sacramento, CA 95814

RE: Support for AB 1437

Dear Assemblymember Huffman,
On behalf of the California Animal Association, a coalition of state and national animal protection groups representing approximately 1.5 million Californians, collectively, we want to thank you for authoring AB 1437 and offer our support for this important legislation.

By requiring all shelled eggs sold in California to meet the animal care standards set forth in the Prevention of Farm Animal Cruelty Act, AB 1437 recognizes the significant animal welfare and human health risks posed by extreme intensive confinement of egg-laying hens.

Studies have shown that egg-laying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and poor conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.

Further, the prestigious Pew Commission on Industrial Farm Production found that food animals that are provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.

The overwhelming support for Proposition 2 confirms that Californians condemn the cruelty associated with the confinement of egg-laying hens in tiny wire cages.

Thank you for your leadership on this. Please count on our organizations to help pass $A B$ 1437, a precedent-setting measure.

Sincerely,
San Diego Animal Advocates

Unifed Animal Nations


Jennifer Fearing
on behalf of the
California Animal Association

HUMANE SOCIETY
VETERINARY MEDICAL ASSOCIATION

Leadership council
Andrew N, Row en, PhD, Chair Washington, D.C

Richard Bach man, Dy Valley, Ca if.

Lauren Bartiield, Dy /b New hill MC

Gary Black, DVM, HS, DACYBA Gest Greminth, R.I.

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Kim Danofl, Ow
Gems, va.
Nicholas Dolman, BVAS, MRCVS, DACVS craton, Mass.

Grant Fuergreent 0 has
Mono, Wo st.
Brenda Forsythe, ids, pho, WM, Cads Guediace Ca ti.

Madeline Graham. DVM Los Angeles, Cath.

Holly Hazard, 10 Washington D.C.
Barb Jones, TVM. MS Davis, Cali.

Paula A. Whizz, CNO
Santa Burbage, Celia
Patricia N: Olson, DYM, Pho Denar Colo

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ASSOCIATE VETERINARIANS
Eric Daw is DVE
Salinas, Coif.
Barbate Hodges, DVM, MBA Dixon, Tall.

Susan B. Krebstuach, DM N Oregon, Wis.

April 8, 2009

Assembly Member Jared Huffman<br>State Capitol Building<br>Sacramento, CA 95814

RE: Support for AB 1437
Dear Asserinbly Member Huffman:
On behalf of the Humane Society Veterinary Medical Association (HSVMA), a professional organization representing hundreds of California veterinarians, I submit this letter in support of AB 1437, a bill that would require that all shelled eggs sold in California as of January 1, 2015 be derived from hens housed in compliance with improved California animal care standards.

Californians have already demonstrated their strong commitment to farm animal welfare by approving Proposition 2, the Prevention of Farm Animal Cruelty Act, in November 2008. Passed by a $63.5 \%$ margin and with more "yes" votes than another other citizen initiative in California history, the Prevention of Farm Animal Cruelty Act requires that egg-laying hens housed on California farms have enough room to stand up, turn around and stretch their limbs by the phase-in date of January 1, 2015.

AB 1437 continues Californians' commitment to improved farm animal welfare by requiring that all eggs sold in California, regardless of their origin, come from hens maintained according to similar standards. This is a logical, next step to ensure all eggs consumed in California are humanely produced.

AB 1437 is also an important public health safety measure since egg-laying hens housed in extreme confinement, as is common on factory farms, suffer from significant stress and an increased likelihood of infection by salmonella, the leading cause of food-borne illness-related deaths in the United States.

Thank you for introducing this important animal welfare measure.
Sincerely,


Barbara Hodges, DVM, MBA
HSVMA Veterinary Consultant
Tel: (530) 759-8106

## Paw

Project
Advocates for Animals A $504(\mathrm{c})(3)$ nonprofit organization

April 8, 2009

Assemblymember Jared Huffman
State Capitol
P.O. Box 942849

Sacramento, CA 94249-0006
Fax: (916) 319-2106

RE: In support of AB 1437
Dear Assemblymember Huffman,
The Paw Project, a nonprofit animal welfare organization, thanks you for authoring AB 1437 and supports this important legislation.

By requiring all shelled eggs sold in California to meet the animal care standards set forth in the Prevention of Farm Animal Cruelty Act, AB 1437 recognizes the significant animal welfare and human health risks posed by extreme intensive confinement of egg-laying hens.

Studies have shown that food animals that are provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.

Thank you for your leadership on this precedent-setting measure.

Sincerely,


James Jensvold on behalf of The Paw Project Rick Inwwley Finn Inyton Dous Litracy Bavid Mugavero Stephanic Piucerl Lyin Sadier

The Honorable Cathleen Galgiani
Chair, Assembly Committee on Agriculture
1020 N Street, Room 362
Sacramento, CA 95814

## Re: AB 1437 (Huffman) - California Egg-Laying Hen Welfare Act - SUPPORT

Dear Chairwoman and Committee Members,
I write today on behalf of the Planning and Conservation League to express our support of AB 1437 (Huffman). AB 1437 will ensure that the eggs Californians consume will meet the standards California voters chose when they approved Proposition 2, the Farm Animal Cruelty Act last year.

The Center for Food Safety, the World Health Organization, and the Food and Agricultural Organizations of the United Nations Salmonella Risk Assessment have all concluded that confinement of egg-laying hens can have potentially serious public health and food safety implications. These conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.

Further, California voters have expressed a preference for the humane treatment of egg-laying hens. In November 2008, Califomians overwhelmingly supported Proposition 2, the Prevention of Farm Animal Cruelty Act, which set forth basic animal care standards for egg-laying hens. AB 1437 would require that all shelled eggs sold in California as of January 1, 2015 be in compliance with the standards set forth in the Act.

Californians overwhelming support of this initiative show that Califormians have a high standard for food quality and animal welfare. AB 1437 will ensure that all eggs sold to consumers are produced in the safe and humane fashion that Californians clearly want.

For these reasons, we request a "YES" vote on AB 1437.
Sincerely,


Tina Andolina
Legislative Director

> 1107 9th Street, Suite 360, Sacramento, CA 95814 Phone: 916-444-8726 Fax: 916-448-1789
> Website: www,pcl,org Email: pclmail@pcl.org
> This letter is printed on $60 \%$ recycled fiber, $30 \%$ post consurper wasle, acid free paper.

RJN - 108


April 62009

Assemblymember Jared Huffman
California State Assembly
State Capitol
Sacramento, CA 95814
FAX (916) 319-2106
RE: $\quad$ Support for $\mathfrak{A}$ B 1437

Dear Assemblymember. Huffman,
7 am pleased to write in support of $\mathcal{A B}$ 1437. This Gill would protect California consumers from the deleterious effects of the sale and consumption of eggs derived from confined hens. Specifically, this Gill will require all eggs sold in California to be produced from egglaying hens that are provided environments that don't restrict their movement or natural behaviors. The cruelty associated with the confinement of egg-laying hens in "battery cages" has been deemed unacceptable by California voters. In November 2008, Californians overwhelmingly supported Proposition 2 by a 63.5 percent margin. Proposition 2 was favored by voters in 47 of California's 58 counties and received more "yes" votes than any other citizen initiative in California history. $\mathfrak{A B} 1437$ will require that all shelled eggs sold in California as of January 1,2015 be in compliance with the basic animal care standards set forth in the Prevention of Farm Animal Cruelty Act

Blackberry Farm has been our home for over thirty-five years. During that time we have raised our family of four children, buried the horses and now grow an orchard of American and English heritage apples. Our flock of chickens continue to run free in the orchard. All chickens deserve such a life and I hope you will do your part to help that come true.

Sincerely,
Aggie Burch

much.


Please fax to: (916) 848-0203
Thank you for introducing AB 1437, the California Egg-Laying Hen Welfare Act. Please add my name to the list of those supporting the bill's passage.


- Printed Name: Physicians Committee for Responsible dudianie-

Signature:


Title: Prese tent
Street Address: $5 / 00$ iniscontin Avenue, Suite coo
City, State, Zip: Clarkioupton, DC 20016
Email: Hamah@ pcrmora
Organization/Compary: $\quad P C R A_{1}$ $\qquad$
You may include the name of my organization/company as a supporter also.

Amy Allen, DVM

TO: Assemblymember Jared Huffman

## RE: Assembly Bill 1437

## ADDRESS: State Capitol

P.O. Box 942849

Sacramento, CA 94249-0006

## Please fax to: (910) 848~0203

Thank you for introducing AB 1437, the California Egg-Laying Hen Welfare Act. Please add my organization/company name to the list of those supporting the bill's passage.

Date: $\qquad$

Printed Name: $\qquad$ Allen

Signature:


Title: $\qquad$
DIM

Street Address;


City, State, Zip: San Retard, C4 9490
Email: AMy trip P SBCGlobal: net


March 26, 2009

The Honorable Jared Huffman
Room 3120
Sacramento, CA 94249-0006

## RE: AB 1437

Dear Assemblymember Huffman:
I am writing on behalf of Animal Place in support of AB 1437, which would prohibit the sale of a shelled egg for human consumption from farms that are not in compliance with farm animal care standards, as specified in Proposition 2.

Hens raised in battery cages are unhealthy, stressed birds bred and maintained to produce an egregiously large number of eggs annually. Stressed animals are more prone to disease and caged birds have a higher risk of producing salmonella tainted eggs than birds given more freedom.

For the welfare of the birds as well as reducing the risk of food-borne illness, Animal Place supports $A B$ 1437 and thanks you for introducing this bill.

Respectfully,


Mari Beach
Education Coordinator


Assemblymember Huffman
State Capitol
P.O. Box 942849

Sacramento, CA 94249
Dear Assemblymember Huffman,
On behalf of our more than 10,000 members across the state of California, the Animal Protection and Rescue League would like to express our support for Assembly Bill 1437-a bill which prohibits the sale of a shelled egg if it is the product of an egg-laying hen who was confined on a fram or place that is not in compliance with California animal care standards. AB 1437 will protect California consumers from the harmful public health, food safety, and animal welfare problems caused by the sale of eggs derived from egg-laying hens who suffer from significant stress and have increased exposure to salmonella, the leading cause of food-borne illness-related death in the United States.

The Animal Protection and Rescue League (APRL) works to reduce animal suffering occurring behind closed doors. APRL was the San Diego County coordinator for California's Proposition 2, which banned the confinement of egg-laying hens in cages so small the animals can barely move. Passing with more than $63 \%$ of the statewide vote, Prop 2 was the most popular citizen's initiative. in California history.

Due to the success of Proposition 2, the movement against cruelty on factory farms has come into the mainstream. Major companies are moving away from the use of battery cage eggs, including Burger King, Carl's Jr., and Safeway. Over 350 universities, including UC Irvine and UC Berkeley, have moved entirely away from using cruel battery cage eggs.

Thank you for sponsoring AB 1437 to protect consumers, the environment, and animals. APRL looks forward to your work on this important legislation.

Sincerely,

## Christine Taceronte

Christina Tacoronti
Campaigns Coordinator
Animal Protection and Rescue League

# The documents following this page were photocopied from the files of 

## Senate Committee on

Health.

## SENATE HEALTH COMMITTEE ANALYSIS

BILL NO: AB 1437 ..... A
AUTHOR: Huffman ..... B
AMENDED: July 2, 2009
HEARING DATE: July 15, 20091
CONSULTANT: ..... 4
Dunstan ..... 3

## SUBJECT

Shelled eggs: sale for human consumption: compliance with animal care standards

## SUMMARY

Prohibits selling shelled eggs for human consumption in California produced by egglaying hens on farms that are not in compliance with specified animal care standards. Requires the Department of Public Health to adopt regulations to implement housing standards for egg laying hens that are consistent with farm animal treatment standards contained in Proposition 2 of 2008.

## CHANGES TO EXISTING LAW

## Existing law:

Prohibits maliciously and intentionally maiming, mutilating, torturing or wounding a living animal, or maliciously and intentionally killing an animal. Prohibits cruelty to animals including, but not limited to, overdriving, overloading, cruelly beating, overworking, torturing, tormenting, killing, or depriving the animal of necessary sustenance, drink, or shelter.

Provides that whoever carries or causes to be carried in ,or upon, any vehicle any domestic animal in a cruel or inhuman manner, or who knowingly and willfully authorizes or permits that animal to be subjected to unnecessary torture, suffering or cruelty of any kind, is guilty of a misdemeanor.

Requires every owner, driver or possessor of any animal in any enclosure to give the animal proper care and attention.

Requires a person who keeps an animal confined in an enclosed area to provide that animal with an adequate exercise area. Prohibits restraining an animal by leash or otherwise in such a way that allows the animal to become entangled or injured, or denies the animal access to adequate shelter, food, and water. Provides an exception for an animal that is in transit, in a vehicle, or in the immediate control of a person.

## Existing law adopted by initiative statute (Proposition 2 of 2008)

Prohibits the tethering or confining any covered animal, on a farm, for all or the majority of any day, in a manner that prevents such animal from: (a) lying down, standing up, and fully extending his or her limbs; and, (b) turning around freely.

Defines an enclosure to any cage, crate or other structure (including what is commonly described as a "gestation crate" for pigs; a "veal crate" for calves; or a "battery cage" for egg-laying hens) used to confine a covered animal.

Requires that specified animals, including an egg-laying hen, shall be able to fully extend limbs without touching the side of an enclosure, including, in the case of egg-laying hens, being able to fully spread both wings without touching the side of an enclosure or other egg-laying hens.

Provides exceptions for transportation, rodeos, fairs, 4-H programs, lawful slaughter, research and veterinary purposes.

Makes a violation of the provisions of the bill a misdemeanor, and prescribes penalties.
Provides that these provisions are in addition to, and not in lieu of, any other laws protecting animal welfare, including the California Penal Code, and also provides that these provisions shall not be construed to limit any state law or regulations protecting the welfare of animals, nor shall these provisions prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.

Provides that the provisions are enacted effective January 1, 2015.

## This bill:

Makes specific findings concerning egg production and the housing of chickens. States that the intent of the Legislature is to protect California consumers from the deleterious health, safety, and welfare effects of the sale and consumption of eggs derived from egglaying hens that are exposed to significant stress which may result in increased exposure to disease pathogens, including salmonella.

States legislative intent that this bill is to supplement the protections provided by Proposition 2.

States that eggs cannot be sold in California unless they were produced in compliance with the provisions of Proposition 2.

Requires the Department of Public Health (DPH), in consultation with the Department of Food and Agriculture (CDFA), to develop regulations regarding housing standards for egg-laying hens that are consistent with the animal welfare care standards adopted in Proposition 2.

States that the regulations shall not prohibit the sale of an egg that is from an egg-laying hen that is confined in accordance with the "Floor Space Per Hen" standards contained in
the 2008 Edition of the United Egg Producers Animal Husbandry Guidelines for Cage Free Production, in effect as of June 15, 2009.
Makes a violation of the provisions of the bill a misdemeanor and prescribes penalties.
States that this bill is in addition to any other animal protection law and does preclude a local government from adopting its own animal welfare law and regulations.

Contains a severability clause allowing remaining portions of the bill to remain operative should portions be found to be invalid or unconstitutional.

Provides that no reimbursement is required for the bill's mandate provisions because any mandated local costs are a result of the creation of a crime.

## FISCAL IMPACT

This version of the bill has not been analyzed by a fiscal committee. There would be some costs to the Department of Public Health to prepare the regulations and for the CDFA to consult on the regulations.

## BACKGROUND AND DISCUSSION

The author notes that Californians approved Proposition 2 by a 63.5 percent majority and that the initiative received more yes votes than any other citizens initiative in California history. The author states that AB 1437 will ensure that all of the hens that provide eggs consumed in California benefit from these animal welfare standards so that they will meet the expectation of the California consumers. Specifically, the author points out that this bill will require all shelled eggs sold in California to be incompliance with the animal care standards of Proposition 2.

## Background

Currently, California is the fifth largest egg-producing state in the nation with more that
19 million egg-laying hens. Iowa is the largest producer with over 52 million egg laying hens in the state.

According to an article in the Journal of the American College of Nutrition, the nutrient density of eggs makes them a valuable contributor to the overall nutritional balance of the diet and, as an economical source of high quality protein, an important component in the diets of the elderly, low-income families, growing children and people limiting calories for weight loss purposes. Eggs are an excellent nutrient-dense food that packs six grams of protein, a bit of vitamin E, riboflavin, folic acid, calcium, zinc, iron, and essential fatty acids into a mere 75 calories. Second to the lactalbumin protein in human milk, eggs have the highest quality protein of any food.

However, eggs are perishable, just like raw meat, poultry and fish. Unbroken, clean, fresh shell eggs may contain Salmonella Enteritidis bacteria that can cause food borne illness, and even death in humans although it does not make the hen sick. While the number of eggs affected is small, there have been cases of food borne illness involving eggs in the last few years. To be safe, eggs must be safely handled, refrigerated, and cooked. Bacteria can be on the outside of an egg shell because the egg exits the hen's
body through the same passageway as feces is excreted. As a result, eggs are washed and sanitized at the processing plant. Bacteria can even be inside an uncracked whole egg. Contamination of eggs may be due to bacteria within the hen's ovary or oviduct before the shell forms around the yolk and white. It is also possible for eggs to become.infected by Salmonella through the pores of the shells after they're laid.

Infants, young children, older adults, pregnant women and people with weakened immune systems are particularly vulnerable to Salmonella infections. A chronic illness can weaken the immune system, making the person vulnerable to food borne illnesses.

Federal and state governments, the egg industry, and the scientific community are working to reduce the incidence of salmonella infection related to eggs. Involved government agencies include: USDA's Food Safety and Inspection Service, Agricultural Research Service, and the Animal and Plant Health Inspection Service; the U.S. Food and Drug Administration; and state departments of agriculture. These agencies have implemented an Egg Safety Action Plan to eliminate Salmonella illnesses due to eggs. The plan identifies systems and practices that must be carried out in order to meet the goal of eliminating Salmonella illnesses associated with the consumption of eggs by 2010.

Salmonella contamination has grabbed headlines on a regular basis. For example, a recent California news report stated that 12,000 pounds of egg rolls had to be recalled due to contaminated black pepper. The recent recall of peanut butter was a result of salmonella contamination.

How hens are housed does have an impact on salmonella contamination. Animals that are crowded are stressed and can suffer more health problems. However, the Association of California Egg Farmers points to a recent study on poultry flock health in Sweden, which showed significantly higher rates of mortality due to bacterial and parasitic disease and cannibalism in litter-based housed and free range housed egg laying hens compared to cage housing. The report also showed the occurrence of viral disease was significantly higher for indoor litter based housing compared to cage housing.

## Prior legislation

AB 594 (Dymally) of 2007 was very similar to Proposition 2. The bill was subsequently changed to another subject.

AB 732 (Hancock) of 2004 was similar to Proposition 2, but applied only to pigs and veal. This bill was held in Assembly Agriculture Committee.

## Arguments in support

Although supporters have written on earlier version of the bill, they do favor requiring that all eggs sold in California come from hens that are meet the standards contain in Proposition 2. They argue that this will ensure that all eggs sold to California consumers are produce in the safe and humane fashion that Californians clearly want. These are provisions that are still in the bill.

## Arguments in opposition

Opponents argue they oppose the bill because it does not contain clear statutory guidance on housing standards for egg-laying hens. They argue that farmers need to know exactly how much space to provide an egg-laying hen and what kind of housing systems will comply with the initiative. They argue that voters embraced a broad principle to give egg-laying hens more space, a decision that egg farmers respect, but in order to continue providing a locally-grown safe and affordable source of food they need enforceable legislation that provides clear cut standards for complying with Proposition 2.

The California Restaurant Association (CRA) and California Grocers Association share a concern that the standards of Proposition 2 should not be extended to all eggs sold in California. They argue that this will severely restrict the availability of eggs for California consumers and drastically increase the prices of the limit quantities of eggs still available. In particular, CRA argues that with the current fiscal crisis restaurateurs are facing even more extreme economic hardships and to remain competitive and keep business alive they cannot simply raise prices to reflect the increased cost of eggs that would result from this bill.

## Letter of concern

The Humane Society of the United States argues that opponents of Proposition 2 are using this vehicle as a means to undermine the will of the voters. They argue that these recent amendments have put the Legislature in the position of pursuing unconstitutional changes to a voter approved initiative. They further argue that the development of regulations regarding housing standard for egg-laying birds is not permitted by Proposition 2. They also argue that the bill as amended faces the risk of being voided by a court under the California and U.S. constitutions. They note that the bill undermines the imitative process which proponents were forced to use when special interests prevented legislative reform for animal confinement practice. They would like the committee to remove the recent amendments.

## PRIOR ACTIONS

Senate Food and Agriculture: 4-1
Assembly Floor: 65-12
Assembly Appropriations: 10-3
Assembly Agriculture: $\quad 8-0$

## COMMENTS

1. Can the Legislature act on this question?

Proposition 2, an initiative, does not provide a means for amendment by the Legislature. The Humane Society of American argues that this bill is an impermissible amendment of the initiative. However, the initiative specifically states that it is in addition to, and not in lieu of, any other laws protecting animal welfare and does not limit any state law or regulations protecting the welfare of animals. To the extent this bill is regarded as another law protecting the welfare of animals, the Legislature can lawfully act on this bill.
2. DPH may not be the proper agency to develop these regulations.

DPH is the state's public health agency. It was created by the Legislature in 2005 out of concerns that public health was not receiving adequate emphasis in a Department of Health Services that contained too many disparate functions. The Legislature wanted a department and director that would deal exclusively with possible public health threats. The question of how to confine egg-laying hens has some public health implications, but the debate is dominated by animal welfare considerations. The language in the bill makes that clear as it directs DPH to develop regulations on housing standards that are consistent with the animal care standards of a portion of the code added by Proposition 2, entitled "Farm animal cruelty."

A proposed amendment would be to require the CDFA to develop the regulations in consultation with DPH.
3. A potentially significant public health impact may be the cost of eggs. According to USDA weekly price reports, eggs from caged hens cost about $\$ 1$ per dozen more. Americans eat over 250 eggs per capita, per year. As noted, eggs are an economical source of high quality protein, an important component in the diets of the elderly and low-income families.

The increased cost of eggs would impact public programs, such as the Women, Infants and Children (WIC) program, a federally funded health and nutrition program for women, infants and children. The WIC program assists in purchases of healthy supplemental foods, including eggs. For cost reasons, the program does not allow the purchase of specialty eggs, including those from cage free hens.

## 4. The bill expands Propositions 2 provisions to hens that lay eggs sold in California, even if produced elsewhere.

States are not prohibited from enacting laws that impact interstate commerce, but the result is different limitations. The test for such laws is stricter than laws that only have an interstate effect. The tests include that there must be a compelling state reason and that the law cannot discriminate against or unreasonably burden interstate commerce.

Another potential limitation on state action is the trade agreements that the United States has entered into, such as the North American Free Trade Agreement (NAFTA). Trade agreements may undermine the ability of states to regulate in the areas of the environment, health care, agriculture, and professions.

Whether this bill, if enacted, would violate interstate commerce provisions or the provisions of NAFT and other trade agreements is unclear.
5. Some urgency exists to clarify rules as initiative provisions become effective January 1, 2015.
Egg producers need certainty about how to comply with Proposition 2, so they can undertake investments to comply with new standards for egg-laying chickens. Given the amount of time it may take to develop the regulations this
bill calls for a suggested amendments that would require the required regulations to be adopted by January 1, 2012.

## POSITIONS

Support: Based on earlier version of the bill
$2^{\text {nd }}$ Chance for Pets
Alpha Canine Sanctuary
Animal Acres
Animal Place
Animal Protection and Rescue League
Animal Welfare Advocacy
American Society for the Prevention of Cruelty to Animals (SPCA)
Avian Welfare Coalition
Bay Animal Hospital
Bon Appétit Management Company
California Animal Association
California Federation for Animal Legislation
Center for Food Safety
Center for Science in the Public Interest
Community Market Natural Foods
Compassionate Carnivores
Dr. Bauer's Advanced Wellness
East Bay Animal Advocates
Farm Animal Protection Project
Farm Sanctuary
Finance Tree, Inc
G Town G Ranch
Green Star Solution
Humane Society of the United States
Humane Society Veterinary Medical Association
Kern County alive
League of Human VotersLe Fort's Organic Crops
Marin Human Society
Mt. Barnabe Farm
Noah's Ark Veterinary Hospital
Orcutt Veterinary Hospital
Orange County People for Animals
PAW PAC
Physicians Committee for Responsible Medicine
Planning and Conservation League
Restaurant Soltan Banoo
Rocket Dog Rescue
Sausalito Animal Hospital
Sugar Beat Sweets
Tamalpais Pet Hospital
TCM, Inc.
Turner's Portable Welding

United Animal Nations<br>Urban Cat Project<br>Vreseis Limited (organic farm)<br>World Society for the Protection of Animals<br>Numerous individuals

## Oppose: Association of California Egg Farmers

Brookhurt Mill
California Farm Bureau Federation
California Grocers Association
California Restaurant Association
Farm Bureau San Diego County
J.S. West Milling Company

Riverside County Farm Bureau, Inc.
Stanislaus County Farm Bureau
Based on earlier version of the bill

## BACKGROUND INFORMATION REQUEST

## TO ASSEMBLY MEMBER Huffman

## AB 1437 SUBJECT: Shelled eggs: sale for human consumption: compliance with animal care standards. CONSULTANT: Concepcion Tadeo

> The above bill has been referred to the Senate Health Committee for consideration. Please complete the following questions WITH ANY SUPPORTING DOCUMENTATION and HAND DELIVER TWO COMPLETE

SETS to Room 2191 SEVEN DAYS PRIOR TO HEARING DATE FOR TBIS BILL. The second set will be forwarded to designated staff in the Republican Caucus. PLEASE ALSO EMALL ANY ELECTRONIC DOCUMENTS AND THIS FORM TO THE CONSULTANT LISTED ABOVE.

Do you plan on amending this bill prior to the hearing?
( ) YES, will amend (Please provide brief summary explaining what amendments will accomplish).

( ) NO, will not amend

## Amendments - please submit ONE SIGNED ORIGINAL PLUS NINE UNSIGNED

COPIES- must be submitted in Legislative Counsel form to the Committee Assistant in Room 2191 NO LATER THAN NOON - SEVEN CALENDAR DAYS PRIOR TO THE BLL'S HEARING DATE. MAJOR LAST MINUTE AMENDMENTS MAY NECESSITATE PUTTING THE BLLL OVER TO A LATER DATE.

1. What is the intent of the bill and reasons prompting its introduction?

The Center for Food Safety has stated that extreme intensive confinement of egg-laying hens can have potentially serious public health and food safety implications. A key finding from the World Health Organization and Food and Agricultural Organization of the United Nations Salmonella Risk Assessment states that reducing flock prevalence results in a direct proportional reduction in human health risk. Egglaying hens subjected to stress are more likely to have higher levels of pathogens in their intestines and poor conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.

According to the Pew Commission on Industrial Farm Production, food animals that are treated well and provided with at least minimum accommodation of their natural behaviors and physical needs are healthier and safer for human consumption.

Californians have a history of establishing basic animal welfare standards for the products they consume. In 2004, the California Legislature passed SB 1520 (Burton), which banned the sale of foie gras by prohibiting the sale in California a product if it is the result of force feeding a bird for the purpose of enlarging the bird's liver beyond normal size (Health \& Safety Code, Chapter 13.4, Section 25980).

In November 2008, Californians approved Proposition 2 by a 63.5 percent margin. Proposition 2 was favored by voters in 47 of California's 58 counties and received more "yes" votes than any other citizen initiative in California history. The proposition prohibits the confinement of an egg-layingRdN deflizd as
any female domesticated chicken, turkey, duck, goose, or guinea fowl kept for the purpose of egg production, in California which restricts her ability to stand up, turn around, and spread her wings. This legislation will ensure that the hens that provide our eggs benefit from the same animal welfare standards to meet the expectations for animal care and food safety of the California consumer.

Specifically, AB 1437 will require all shelled eggs sold in California as of January 1, 2015 be in compliance with the animal care standards set forth in Division 13.8 of the Health and Safety Code.

The animal-cruelty and human health concerns vocalized by California voters satisfy the constitutional requirement that a strongly compelling state interest exists to require all eggs sold in California comply with the animal welfare standards established under Proposition 2. Confining birds in small cages that restrict their natural behaviors constitutes animal cruelty, which provides compelling reason to pass $A B$ 1437. By requiring all eggs to meet the same requirements, $A B 1437$ would treat in-state and out-of-state egg producers equally.

AB 1437 undoubtedly effectuates legitimate state interests. As stated in AB 1437's findings, "it is the intent of the Legislature to protect California consumers from the deleterious, health, safety, and welfare effects of the sale and consumption of eggs derived from egg-laying hens that are exposed to significant stress and may result in increased exposure to disease pathogens including salmonella."
2. Sponsor (include phone number).

Author-sponsored
3. Staff contact (please include daytime, home and cell phone number).

Paige Brokaw
Paige.brokaw@asm.ca.gov
319-2715-direct
925/ 699-0766-cell
4. What is the fiscal impact?

According to the Assembly Appropriations Committee analysis (5/13/09): Negligible, non-reimbursable costs for prosecution, offset by fine revenue, for misdemeanor violations associated with not complying with California animal care standards. http://www.leginfo.ca.gov/pub/09-10/bill/asm/ab 1401-1450/ab_1437 cfa_20090512_182647_asm_comm.html
5. Give summary of arguments in support or opposition--ATTACH COPIES OF SUPPORT/OPPOSE LETTERS IN ALPHABETICAL ORDER - (due seven days prior to the hearing.)

Support:

Alpha Canine Sanctuary
Animal Acres
Animal Internal Medicine
Animal Place
Animal Protection and Rescue League
Animal Welfare Advocacy
ASPCA
Avian Welfare Coalition
Bay Animal Hospital
Blackberry Farm
Bon Appétit Management Company
California Animal Association
Center for Food Safety
Center for Science in the Public Interest
Community Market Natural Foods
Compassionate Carnivores
Dr. Bauer's Advanced Wellness
Dr. Bay's Veterinary House Calls
East Bay Animal Advocates
Farm Animal Protection Project
Farm Sanctuary
Finance Tree, Inc
G Town G Ranch
Humane Society of the United States
Humane Society Veterinary Medical Association
Kern County Alive
Le Forte's Organic Crops
League of Humane Voters
Marin Vegetarian Education Group
Marin Humane Society

Middleton Farm
Mt. Barnabe Farm
Natural Pet
The New School of Cooking
Noah's Ark Veterinary Hospital
North Star Pet Assistance
North Tustin Veterinary Clinic
Orcutt Veterinary Hospital
PAW PAC
Paw Project
Orange County People for Animals
Physicians Committee for Responsible Medicine
Planning and Conservation League
Political Action for Animals
Restaurant Soltan Banoo
Rocket Dog Rescue
Sausalito Animal Hospital
Sierra Club California
Shelter Medicine Support
Sugar Beat Sweets
Tamalpais Pet Hospital
TCM, Inc.
United Animal Nations
Urban Cat Project
Vreseis Unlimited (organic farm)
World Society for the Protection of Animals
$2^{\text {nd }}$ Chance for Pets
121 Individuals

ASPCA states that "Although many pet owners may in their own minds separate farm animals from companion animals such as cats and dogs, it is evident that people are becoming increasingly aware of the sentient nature of farm animals. There is a greater interest in the food we buy, how it's produced, and how it impacts the environment."

Humane Society of the United States states that AB 1437 would require all shelled eggs sold in California to meet the animal care standards set forth in the Prevention of Farm Animal Cruelty Act. They reference that according to the Center for Food Safety, extreme intensive confinement of egg laying hens can have potentially serious public health and food safety implications, and that egg laying hens subjected to stress are more likely ro have higher levels of pathogens in their intestines and poor conditions increase the likelihood that consumers will be exposed to higher levels of food-borne pathogens.

Humane Society Veterinary Medical Association states that "AB 1437 continues California's commitment to improved farm animal welfare by requiring all eggs sold in California, regardless of origin, come from hens maintained according to similar standards. This is a logical, next step to ensure all eggs consumed in California are humanely produced. AB 1437 is also an important public health safety measure since egg-laying hens housed un extreme confinement, as is common on factory farms, suffer from significant stress and an increased likelihood of infection by salmonella, the leading cause of food-borne illness related deaths in the US."

Opposition:

## Association of California Egg Farmers

California Grocers Association

Association of California Egg Farmers states that AB 1437 should include clear standards for housing and space for egg-laying hens. The standard set forth in Prop. 2 specifies that egg-laying hens may not be confined for a majority of the day in a manner that prevents the hen from lying down, standing up, fully extending her limbs, and turning around freely. The Association states that California's egg farmers need clear, legally enforceable standards in AB 1437 because of the substantial financial requirements they may face to comply with Proposition 2, the time and expense involved in obtaining permits and modifying enclosures, the potential for severe criminal penalties and the alterations in animal husbandry practices may be necessary.
6. If any related PRIOR legislation, please list below.

None.

Consumer Egg Prices For One Dozen Large Eggs
Based upon the USDA Weekly Retall Shell Egg Feature Report for 17,000 Retall Grocery Stores Across the U.S.

|  | Jan. | Feb. | Mar | Apr. | May | June | July | Aug. | Sept | Oct. | Nov. | Dec. | Ave. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cage | \$1.59 | 1.62 | 1.64 | 1.42 | 1.44 | 7.16 | 1.35 | 1.10 | 1.26 | 1.32 | 1.30 | 1.11 | 1.36 |
| Cage-Free | \$2.50 | 2.64 | 2.62 | 3.05 | 3.04 | 2.82 | 2.78 | 2.88 | 2.75 | 2.78 | 2.85 | 2.79 | 2.79 |
| Organio | \$3.55 | 3.48 | 3.50 | 3.51 | 3.92 | 3.69 | 3.93 | 3.96 | 3.98 | 3.95 | 3.42 | 3.59 | 3.71 |


5975. Willful Abandonment of Animal
(a) Every person who willfully abandons any animal is guilty of a misdemeanor.
(b) This section shall not apply to the release or rehabilitation and release of native Califomia wildife pursuant to statute or regulations of the California Department of Fish and Game. (Enacted 1963, amended 1999.)

## 597t. Confined Animals

Every person who keeps an animal confined in an enclosed area shall provide it with an adequate exercise area. If the anmal is restricted by a leash, rope, or chain, the leash, rope, or chain shall be affixed in such a manner that it will prevent the animal from becoming entangled or injured and permit the animal's access to adequate shelter, food and water. Violation of this section constitutes a misdemeanor.
This section shall not apply to an animal which is in transit, in a vebicle, or in the momediate control of a person. (Enacted 1970, amended 1971.)

## 597u. Killing Animals by Use of Carbon Monoxide

(a) No person, peace officer, officer of a humane society, or officer of a pound or animal regulation department of a public agency shall kill any animal by using any of the following methods:
(1) Carbon monoxide gas.
(2) Intracardiac injection of a euthanasia agent on a conscious animal, unless the animal is heavily sedated or anesthetized in a humane manner, or comatose, or unless, in light of all the relevant circumstances, the procedure is justifiable.
(b) With respect to the killing of any dog or cat, no person, peace officer, officer of a humane society, or officer of a pound or animal regulation department of a public agency shall use any of the methods specified in subdivision (a) or any of the following methods.
(1) High-altitude decompression chamber.
(2) Nitrogen gas. (Enacted 199\%, amended 2005.)

## 597v. Euthanasia of Newborn Dogs and Cats: Methods of Killing

No person, peace officer, officer of a humane society, or officer of a pound or animal regulation department of a public agency shall kill any newbom dog or cat whose eyes have not yet opened by any other method than by the use of chloroform vapor or by inoculation of barbiturates. (Enacted 1972, last amended 1998.)

## 597x. Disabled Equine: Sales or Transportation for Commercial Slaughter:

## Misdemeanor

(a) Notwithstanding Section 18734 of the Food and Agricultural Code or any other provision of law, it is unlawful for any person to sell, attempt to sell, load, cause to be loaded, transport, or atterupt to transport any live horse, mule, burro, or pony that is disabled, if the animal is intended to be sold, loaded, or transported for commercial slaughter out of the state.
(b) For the purposes of this section; "disabled animal" includes; but is not limited to, any animal that has broken limbs, is unable to stand and balance itself without assistance, cannot walk, or is severely injured.
(c) A person who violates this section is guilly of a misdemeanor and subject to the same penalties imposed upon a person convicted of a misdemeanor under Section 597 a. (Enacted 1993.)
(2) The attending or on-call veterinarian shall submit a brief written listing of any ankinal injury requiring veterinary treatment to the Veterinary Medical Board within 48 Foriss of the conclusion of the rodeo.
(3) The rodeo management shall ensure that there is a conveyance available at all tivees for the immediate and humane removal of any injured animal.
(e) The rodeo management shall ensure that no electric prod or similar device is used on nay anmal once the animal is in the holding chute, unless necessary to protect the partucipants and spectators of the rodeo.
(f) A violation of this section is an infraction and shall be punishable as follows:
(1) A fine of not less than five hundred dollars ( $\$ 500$ ) and not more than two thousand dollars $(\$ 2,000)$ for a first violation.
(2) A fine of not less than one thousand five hundred dollars $(\$ 1,500)$ and not more than five thousand dollars $(\$ 5,000)$ for a second or subsequent violation. (Enacted 2000, amended 2007.)

## 597. Crimes Against Animals-Felony or Misdemeanor

(a) Except as provided in subdivision (c) of this section or Section 599c, every person who maliciously and intentionally maims, mutilates, tortures, or wounds a living animal, or maliciously and intentionally kills an animal, is guilty of an offense punishable by imprisonment in the state prison, or by a-fine of not more than twenty thousand dollars ( $\$ 20,000$ ), or by both the fine and imprisonment, or, alternatively, by imprisonment in a county jail for not more than one year, or by a fine of not more than twenty thousand dollars ( $\$ 20,000$ ), or by both the fine and imprisonment.
(b) Except as otherwise provided in subdivision (a) or (c), every person who overdrives, overloads, drives when overloaded, overworks, tortures, torments, deprives of necessary sustenance, drink, or shelter, cruelly beats, mutilates, or cruelly kills any animal, or causes or procures any animal to be so overdriven, overloaded, driven when overloaded, overworked, tortured, tormented, deprived of necessary sustenance, drink, shelter, or to be cruelly beaten, mutilated, or cruelly killed; and whoever, having the charge or custody of
 inflicts unnecessary cruelty upon the animal, or in any manner abuses any animal, or fails to provide the animal with proper food, drink, or shelter or protection from the weather, or who drives, rides, or otherwise uses the animal when unfit for labor, is, for every such offense, guilty of a crime punishable as a misdemeanor or as a felony or alternatively punishable as a misdemeanor or a felony and by a fine of not more than twenty thousand dollars ( $\$ 20,000$ ).
(c) Every person who maliciously and intentionally maims, mutilates, or tortures any mammal, bird, reptile, amphibian, or fish as described in subdivision (d), is guilty of an offense punishable by imprisonment in the state prison, or by a fine of not more than twenty thousand dollars ( $\$ 20,000$ ), or by both the fine and imprisonment, or, alternatively, by imprisonment in the county jail for not more than one year, by a fine of not more than twenty thousand dollars $(\$ 20,000)$, or by both the fine and imprisonment.
(d) Subdivision (c) applies to any marnmal, bird, reptile, amphibian, or fish which is a creature described as follows:
(1) Endangered species or threatened species as described in Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code.
(2) Fully protected birds described in Section 3511 of the Fish and Game Code.
(3) Fully protected mammals described in Chapter 8 (commencing with Section 4700) of Part 3 of Division 4 of the Fish and Game Code.
(4) Fully protected reptiles and amphibians described in Chapter 2 (commencing with Section 5050) of Division 5 of the Fish and Game Code.

## ANALYSIS BY THE LEGISLATIVE ANALYST

## BACKGROUND

Animal agriculture is a major industry in California. Over 40 million animals are raised for commercial purposes on California farms and ranches. California's leading livestock commodities are milk and other dairy products, cattle, and chickens.
In recent years, there has been a growing public awareness about farm animal production methods, and how these practices affect the treatment of the animals. In particular, concerns have been expressed about some animal farming practices, including the housing of certain animals in confined spaces, such as cages or other restrictive enclosures.
Partly in response to these concerns, various animal farming industries have made changes in their production practices. For example, certain industries have developed guidelines and best practices aimed, in part, at improving the care and handling of farm animals.

State law prohibits cruelty to animals. Under stare law, for example, any person who keeps an animal confined in an enclosed area is required to provide it with an adequate exercise area, and permit access to adequate shelter, food, and water. Other laws specifically related to farm animals generally focus on the humane transportation and slaughter of these animals. Depending upon the specific violation, an individual could be found guilty of a misdemeanor or felony punishable by a fine, imprisonment, or both.

## PROPOSAL

Beginning January 1, 2015, this measure prohibits with certain exceptions the confinement on a farm of pregnant pigs, calves raised for veal, and egg-laying hens in a manner that does not allow them to turn around freely, lie down, stand up, and fully extend their limbs. Under the measure, any person who violates this law would be guilty of a misdemeanor, punishable by a fine of up to $\$ 1,000$ and/or imprisonment in county jail for up to six months.

## FISCAL EFFECTS

Compared to current practice most commonly used by California farmers in the affected industries, this measure would require more space and/or alternate methods for housing pregnant pigs, calves raised for veal, and egg-laying hens. As a result, this measure would increase production costs for some of these farmers. To the extent that these higher production costs cause some farmers to exit the business, or otherwise reduce overall production and profitability, there could be reduced state and local tax revenues. The magnitude of this fiscal effect is unknown, but potentially in the range of several million dollars annually.
Additionally, this measure could result in unknown, but probably minor, local and state costs for enforcement and prosecution of individuals charged with the new animal confinement offense. These costs would be partially offset by revenue from the collection of misdemeanor fines.

## * ARGUMENT IN FAVOR OF PROPOSITION 2

## YES on Proposition 2-Stop Animal Cruelty

Proposition 2 is a moderate measure thar stops cruel and inhumane trearment of animals-ending the practice of cramming farm animals into cages so small the animals can't even turn around or stretch their limbs.
Voting YES on Proposition 2 prevents animal cruelry, promores food safety, supports family farmers, and protects the environment. The agribusiness interests opposing Proposition 2-masquerading as the deceptively named Californians for Safe Food-have a record of duping the public, harming animals, and polluting the environment.

Voting YES on Proposition 2 means:
Preventing cruelty to animals. It's simply wrong to confine veal calves, breeding pigs, and egg-laying hens in tiny cages barely larger than their bodies. Calves are tethered by the neck and can barely move; pigs in severe confinement bite the metal bars of their crates, and hens get trapped and even impaled in their wire cages. We wouldn'r force our pets to live in filthy, cramped cages for their whole lives, and we shouldn'r force farm animals to endure such misery. All animals, including those raised for food, deserve humane treatment.

Improving our health and food safery. We all witnessed the cruel treatment of sick and crippled cows exposed by a Chino slaughter plant investigation this year, prompting authorities to pull meat off school menus and initiate a nationwide recall. Factory farmers have put our health at risk by allowing these terrible abuses, and now are recklessly telling us it's okay to keep animals in overcrowded, inhumane conditions. Cramming tens of thousands of animals into tiny cages fosters the spread of animal diseases that may affect people. Proposition 2 is better for animals-and for us.

Supporting family farmers. California family farmers support Proposition 2 because they believe food quality and safery are enhanced by better farming practices. Increasingly,
they're supplying mainstream retailers like Safeway and Burger King. Factory farms cut corners and drive family farmers out of business when they put profits ahead of animal welfare and our health.
. Protecting air and water and safeguarding the environment.
The American Public Heaith Association has called for a moratorium on new factory farms because of the devastating effects these operations can have on surrounding communities. Factory farms often spread waste on the ground untreatedcontaminating our waterways, lakes, groundwater, soil, and air. By phasing out the worst animal confinement practices, Proposition 2 helps protect our precious natural resources. That's why California Clean Water Action and Sierra Club California support Proposition 2.

A reasonable and common-sense reform. Proposition 2 provides ample cime-until 2015-for factory farmers using these severe confinement methods to shift to more humane pracrices. Arizona, Colorado, Florida, and Oregon have passed similar laws. California veterinarians; family farmers; the Center for Science in the Public Interest and the prestigious Pew Commission on animal agriculture; Republican and Democratic elected officials; Episcopal and Methodist church leaders; Narional Catholic Rural Life Conference; the Consumer Federation of America; and others recommend voting YES on Proposition 2.

Visit www. YesOnProp 2.org.
WAYNE PACELLE, President
The Humane Society of the United States
DR. KATE HURLEY, D.V.M., M.P.V.M., Clinical Professor
School of Veterinary Medicine, University of California, Davis
ANDREW KIMBRELL, Executive Director
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## - rebuttal to argument in favor of proposition 2

VOTE NO on Proposition 2 because it HURTS California families.
Thousands of jobs will be lost and egg prices could skyrocket for California consumers.
A UC Davis study says Proposition 2 will eliminate Californiaproduced safe, fresh, affordable eggs. We'll end up buying eggs trucked in from thousands of miles away, including Mexico.

VOTE NO on Proposition 2 because it ENDANGERS both food safery and animal welfare.
Leading food safety, veterinary, and public health experts oppose Proposition 2. They know modern housing systems for egg-laying hens are safe, sound, and humane for the hens, and they protect human health.
These modern systems are designed for proper care and trearment, providing ample space, food, water, light, and sanitation, allowing hens to stand, stretch, curn around, and lie down. Hens are protected from migratory birds and wild animals (which can carry BIRD FLU), and from living in-and laying eggs in-their own waste, which can contain Salmonella bacteria.

By effectively banning modern housing, Prop. 2 actually harms egg-laying hens, undermines animal welfare, endangers food safery, and risks public health.

VOTE NO on Proposition 2 because it's RISKY.
Proponents say this measure is "moderate," but it's really EXTREME, ignoring science-based food safery and animal welfare guidelines while endangering the health of California families.

Proponents say the measure deals with animal treatment, but they don't tell you California law has long required humane treatment of animals, and still does.
PLEASE VOTE NO ON PROPOSITION 2. Keep California food SAFE.

DEAN GLIVER, Professor Emeritus of Food Safery
University of California at Davis, School of Veterinary Medicine
MIKE KARLE, DVM, President
Association of California Veterinarians
HECTOR CERVANTES, DVM, President
American College of Poultry Veterinarians

## ARGUMENT AGAINST PROPOSITION 2

Proposition 2 is UNNECESSARY, RISKY, and EXTREME. It is sponsored by a well-funded Washington, D.C.-based special interest group and will have dangerous, expensive consequences for California.

Proposition 2 puits Californians AT RISK for AVIAN INFLUENZA, Salmonella contamination, and other diseases. California farmers help protect Californians against Avian Influenza, or BIRD FLU, and other diseases by using modern housing systems to raise egg-laying hens-housing systems effectively banned by Proposition 2. It is so EXTREME that it also effectively bans "cage-free" eggs, forcing hens ourdoors for most of the day.
"This outdoor access enhances the likelihood that such poultry will have direct contact with migratory and wild birds as well as other animals, substantially increasing the risk of Avian Influenza, Exotic Newcastle Disease, and other diseases." - UNITED STATES ANIMAL HEALTH ASSOCIATION

According to the WORLD HEALTH ORGANIZATION, transmission of bird flu from poultry to humans results in "very severe disease" and "could mark the start of a global outbreak (pandemic)."

Nearly all California farmers follow the California Department of Food and Agriculture's California Egg Quality Assurance Program, assuring the highest standards for FOOD SAFETY and PUBLIC HEALTH. This program has resulted in the virtual elimination of food-borne illness, like Salmonella, in California eggs. In fact, according to the California Deparment of Food and Agriculture, no case of Salmonella has been traced to California egg production in nearly a decade. Eggs produced and trucked in from out-of-state and Mexico are not required to meet the same high food safety standards as California eggs.

Proposition 2 HARMS California CONSUMERS who rely on safe, fresh, affordable California-raised eggs for their families. Consumers will be forced to buy eggs trucked in thousands of miles away from out-of-state and MEXICO. California family farmers will be driven out of business. It will COST thousands of JOBS, and more than $\$ 600 \mathrm{MILLION}$ in ECONOMIC ACTIVITY will be LOST, hurting the state and local economies.

California eggs will be MORE EXPENSIVE. With gasoline, housing, and basic grocery costs at an all-time high, Californians can't. afford to pay higher prices for food.
Proposition 2 is misleading because it refers to treatment of several farm animals, but it actually addresses bousing methods. The measure primarily affects egg-laying hens. Most food safety officials, public health experts, veterinarians, and animal welfare advocates support modern housing systems, which provide the best possible care for hens while also protecting them, and humans alike, from injury, illness, and disease.
Proposition 2 is UNNECESSARY because California law ALREADY PROTECTS animal welfare and safery.
Proposition 2:

- INCREASES THE RISK OF BIRD FLU
- INCREASES THE RISK OF FOOD-BORNE ILLNESS, LIKE SALMONELLA
- INCREASES GROCERY PRICES OF CALIFORNIA EGGS
- COSTS THOUSANDS OF CALIFORNIA JOBS AND PUTS FARMERS OUT OF BUSINESS
- COSTS CALIFORNIA $\$ 615$ MILLION IN ECONOMIC ACTIVITY
- HARMS THE ENVIRONMENT BY CONTRIBUTING TO GLOBAL WARMING
Family farmers, veterinarians, public health and food safery experts, and consumers urge a "NO" vote on Proposition 2. Visit www.safecaliforniafood. org.

VOTE NO ON PROP. 2.
KEEP CALIFORNIA EGGS SAFE. AFFORDABLE. FRESH. LOCAL.

DR. CRAIG REED, DVM, Former Deputy Administrator
Food Safery and Inspection Service, United States Deparment of Agriculture (USDA)
DR. TIM E. CARPENTER, Ph.D., Professor of Epidemiology
Department of Medicine and Epidemiology, School of Vererinary Medicine, UC Davis
DR. PATRICIA BLANCHARD, DVM, Ph.D., Branch Chief
Universiry of California Animal Health and Food Safery Laboratory System

## $\star$ REBUTTAL TO ARGUMENT AGANST PROPOSITION 2 *

YES on Proposition 2 Protects Animals, Food Safety, and the Environment.
Factory farming corporations trot out "experts" aligned with industry to scare voters with false claims and junk science. It's just common sense to allow animals to lie down, turn around, and stretch their limbs. Suggesting it's dangerous is ridiculous.

Science-based, mainstream organizations supporting Prop. 2 include:

- Consumer Federation of America
- Humane Society of the Unired States
- Union of Concerned Scientists
- Pew Commission on Industrial Farm Animal Production
- Sierra Club California
- California Clean W/arer Action

Proposition 2's opponents are bankrolled by companies that put profits ahead of people and animals.

One major funder, Moark LLC, paid to settle criminal cruelty charges for throwing live birds into trash bins. Another, United Egg Producers, paid to settle false advertising allegations brought by 17 attorneys general related to misleading claims about animal welfare.

The fact is, animals crowded in cages are MORE likely to be infected with Salmonella and other diseases than those in cage-free facilities.
And scare tactics about costs? The industry's own economist admitted it costs less than one additional penny per egg to stop cramming hens in cages.
The opponents have it all wrong. They fail to mention that the vast majority of chickens in food production already are not confined in small cages. They also omic mention of Prop. 2's protection of calves and pigs, and the misery these animals endure in tiny crates. Vote YES on Prop. 2.
www. YesOnProp2.org
DR. IXCHEL MOSLEY, DVM, President San Diego County Veterinary Medical Association NIGEL WALKER, California Egg Farmer
MICHAEL JACOBSON, Ph.D., Executive Director
Center for Science in the Public Interest

## STANDARDS FOR CONFINING FARM ANIMALS. INITIATIVE STATUTE.

- Requires that calves raised for veal, egg-laying hens and pregnant pigs be confined only in ways that allow these animals to lie down, stand up, fully extend their limbs and turn around freely.
- Exceptions made for transportation, rodeos, fairs, 4-H programs, lawful slaughter, research and veterinary purposes.
- Provides misdemeanor penalties, including a fine not to exceed $\$ 1,000$ and/or imprisonment in jail for up to 180 days.


## Summary of Legislative Analyst's Estimate of Net State and Local Government Fiscal Impact:

- Potential unknown decrease in state and local tax revenues from farm businesses, possibly in the range of several million dollars annually.
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us.



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# CALIFORNIA <br> GENERALELECTION 

Tuesday, November 4, 2008 * Official Voter Information Guide

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STANDARDS FOR CONFINING FARM ANIMALS. INITIATIVE STATUTE.

PROP 2

PREPARED BY THE ATTORNEY GENERAL

STANDARDS FOR CONFINING FARM ANIMALS. INITIATIVE STATUTE.

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| Proposition 1 Removed from Ballo | PROP | STANDARDS FOR CONFINING FARM ANIMALS. INITIATIVE STATUTE. |  |  |  |
| Proposition 1A | 2 |  |  |  |  |

## ANALYSIS BY THE LEGISLATIVE ANALYST

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Partly in response to these concerns, various animal farming industries have made changes in their production practices. For example, certain industries have developed guidelines and best practices aimed, in part, at improving the care and handling of farm animals.

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## PROPOSAL

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## FISCAL EFFECTS

Compared to current practice most commonly used by California farmers in the affected industries, this measure would require more space and/or alternate methods for housing pregnant pigs, calves raised for veal, and egg-laying hens. As a result, this measure woutdincrease production costs for some of these farmers. To the extent that these higher production costs cause some farmers to exit the business, or otherwise reduce overall production and profitability, there could be reduced state and local tax revenues. The magnitude of this fiscal effect is unknown, but potentially in the range of several million dollars annually.

Additionally, this measure could result in unknown, but probably minor, local and state costs for enforcement and prosecution of individuals charged with the new animal confinement offense. These costs would be partially offset by revenue from the collection of misdemeanor fines.

Back to the top

YES on Proposition 2—Stop Animal Cruelty Proposition 2 is UNNECESSARY, RISKY, and EXTREME. It is sponsored by a wellfunded Washington, D.C.-based special interest group and will have dangerous, expensive consequences for California. farm animals into cages so small the animals can't even turn around or stretch their limbs.

Voting YES on Proposition 2 prevents animal cruelty, promotes food safety, supports family farmers, and protects the environment. The agribusiness interests opposing Proposition 2-masquerading as the deceptively named Californians for Safe Food-have a record of duping the public, harming animals, and polluting the environment.

## Voting YES on Proposition 2 means:

. . . Preventing cruelty to animals. It's simply wrong to confine veal calves, breeding pigs, and egg-laying hens in tiny cages barely larger than their bodies. Calves are tethered by the neck and can barely move, pigs in severe confinement bite the metal bars of their crates, and hens get trapped and even impaled in their wire cages. We wouldn't force our pets to live in filthy, cramped cages for their whole lives, and we shouldn't force farm animals to endure such misery. All animals, including those raised for food, deserve humane treatment.
... Improving our health and food safety. We all witnessed the cruel treatment of sick and crippled cows exposed by a Chino slaughter plant investigation this year, prompting authorities to pull meat off school menus and initiate a nationwide recall. Factory farmers have put our health at risk by allowing these terrible abuses, and now are recklessly telling us it's okay to keep animals in overcrowded, inhumane
conditions. Cramming tens of thousands of animals into tiny cages fosters the spread of animal diseases that may affect people. Proposition 2 is better for animals-and for us.
. . . Supporting family farmers. California family farmers support Proposition 2 because they believe food quality and safety are enhanced by better farming practices. Increasingly, they're supplying mainstream retailers like Safeway and Burger King. Factory farms cut corners and drive family farmers out of business when they put profits ahead of animal welfare and our health.
... Protecting air and water and safeguarding the environment. The American Public Health Association has called for a moratorium on new factory farms because of the devastating effects these operations can have on surrounding communities. Factory farms often spread waste on the ground untreatedcontaminating our waterways, lakes, groundwater, soil, and air. By phasing out the worst animal confinement practices, Proposition 2 helps protect our precious natural resources. That's why California Clean Water Action and Sierra Club California support Proposition 2.
. . . A reasonable and common-sense reform. Proposition 2 provides ample time-until 2015-for factory farmers using these severe confinement methods to shift to more humane practices. Arizona, Colorado, Florida, and Oregon have passed similar laws. California veterinarians; family farmers; the Center for Science in the Public Interest and the prestigious Pew Commission on animal agriculture; Republican and Democratic elected officials; Episcopal and Methodist church leaders; National Catholic Rural Life
and Mexico are not required to meet the same high food safety standards as
California eggs.
Proposition 2 HARMS California CONSUMERS who rely on safe, fresh, affordable California-raised eggs for their families. Consumers will be forced to buy eggs trucked in thousands of miles away from out-of-state and MEXICO. California family farmers will be driven out of business. It will COST thousands of JOBS, and more than $\$ 600$ MILLION in ECONOMIC ACTIVITY will be LOST, hurting the state and local economies. California eggs will be MORE EXPENSIVE. With gasoline, housing, and basic grocery costs at an all-time high, Californians can't afford to pay higher prices for food.

Proposition 2 is misleading because it refers to treatment of several farm animals, but it actually addresses housing methods. The measure primarily affects egg-laying hens. Most food safety officials, public health experts, veterinarians, and animal welfare advocates support modern housing systems, which provide the best possible care for hens while also protecting them, and humans alike, from injury, illness, and disease.

Proposition 2 is UNNECESSARY because California law ALREADY PROTECTS animal welfare and safety.

Proposition 2:

- INCREASES THE RISK OF BIRD FLU
- INCREASES THE RISK OF FOOD-BORNE ILLNESS, LIKE SALMONELLA
- INCREASES GROCERY PRICES OF CALIFORNIA EGGS

Conference; the Consumer Federation of America; and others recommend voting YES on Proposition 2.<br>Visit www. YesOnProp2.org.<br>WAYNE PACELLE, President The Humane Society of the United States<br>DR. KATE HURLEY, D.V.M., M.P.V.M., Clinical<br>Professor<br>School of Veterinary Medicine, University of California, Davis

ANDREW KIMBRELL, Executive
Director
Center for Food Safety

## REBUTTAL TO ARGUMENT IN FAVOR OF PROPOSITION 2

NOTE NO on Proposition 2 because it HURTS Califormia families.

Thousands of jobs will be lost and egg prices could skyrocket for California consumers.

A UC Davis study says Proposition 2 will eliminate California-produced safe, fresh, affordable eggs. We'll end up buying eggs trucked in from thousands of miles away, including Mexico.

VOTE NO on Proposition 2 because it ENDANGERS both food safety and animal welfare.

Leading food safety, veterinary, and public health experts oppose Proposition 2. They know modern housing systems for egg-

- COSTS THOUSANDS OF CALIFORNIA JOBS AND PUTS FARMERS OUT OF BUSINESS
- COSTS CALIFORNIA $\$ 615$ MILLION IN ECONOMIC ACTIVITY
- HARMS THE ENVIRONMENT BY CONTRIBUTING TO GLOBAL WARMING

Family farmers, veterinarians, public health and food safety experts, and consumers urge a "NO" vote on Proposition 2. Visit www.safecaliforniafood.org.

VOTE NO ON PROP. 2.
KEEP CALIFORNIA EGGS SAFE. AFFORDABLE. FRESH. LOCAL.

## DR. CRAIG REED, DVM, Former

Deputy
Administrator
Food Safety and Inspection Service, United States
Department of Agriculture (USDA)

## DR. TIM E. CARPENTER, Ph.D.,

 Professor of
## Epidemiology

Department of Medicine and Epidemiology, School of Veterinary Medicine, UC Davis

## DR. PATRICIA BLANCHARD, DVM,

PhD.,
Branch Chief
University of California Animal Health and Food
Safety Laboratory System

REBUTTAL TO ARGUMENT AGAINST PROPOSITION 2
laying hens are safe, sound, and humane for the hens, and they protect human health.

These modern systems are designed for proper care and treatment, providing ample space, food, water, light, and sanitation, allowing hens to stand, stretch, turn around, and lie down. Hens are protected from migratory birds and wild animals (which can carry BIRD FLU), and from living inand laying eggs in-their own waste, which can contain Salmonella bacteria.

By effectively banning modern housing, Prop. 2 actually harms egg-laying hens, undermines animal welfare, endangers food safety, and risks public health.

VOTE NO on Proposition 2 because it's RISKY.

Proponents say this measure is "moderate," but it's really EXTREME, ignoring sciencebased food safety and animal welfare guidelines while endangering the health of California families.

Proponents say the measure deals with animal treatment, but they don't tell you California law has long required humane treatment of animals, and still does.

PLEASE VOTE NO ON PROPOSITION 2. Keep California food SAFE.

DEAN CLIVER, Professor Emeritus of Food Safety
University of California at Davis, School of Veterinary Medicine

MIKE KARLE, DVM, President
Association of California Veterinarians

## HECTOR CERVANTES, DVM,

 PresidentAmerican College of Poultry Veterinarians

YES on Proposition 2 Protects Animals, Food Safety, and the Environment.

Factory farming corporations trot out "experts" aligned with industry to scare voters with false claims and junk science. It's just common sense to allow animals to lie down, turn around, and stretch their limbs. Suggesting it's dangerous is ridiculous.

Science-based, mainstream organizations supporting Prop. 2 include:

- Consumer Federation of America
- Humane Society of the United States
- Union of Concerned Scientists
- Pew Commission on Industrial Farm Animal Production
- Sierra Club California
- California Clean Water Action

Proposition 2's opponents are bankrolled by companies that put profits ahead of people and animals.

One major funder, Moark LLC, paid to settle criminal cruelty charges for throwing live birds into trash bins. Another, United
Egg Producers, paid to settle false advertising allegations brought by 17 attorneys general related to misleading claims about animal welfare.

The fact is, animals crowded in cages are MORE likely to be infected with Salmonella and other diseases than those in cage-free facilities.

And scare tactics about costs? The industry's own economist admitted it costs less than one additional penny per egg to
stop cramming hens in cages.
The opponents have it all wrong. They fail to mention that the vast majority of chickens in food production already are not confined in small cages. They also omit mention of Prop. 2's protection of calves and pigs, and the misery these animals endure in tiny crates.

Vote YES on Prop. 2.
www.YesOnProp2.org
DR. IXCHEL MOSLEY, DVM, President San Diego County Veterinary Medical Association

NIGEL WALKER, California Egg Farmer
MICHAEL JACOBSON, Ph.D.,
Executive Director
Center for Science in the Public Interest
approval of the issuance of any bonds issued to refund any bonds originally issued or any previousty issued refunding bonds.
2704.20. The Legislature hereby finds and declares that, inasmuch as the proceeds from the sale of bonds authorized by this chapter are not "proceeds of taxes" as that term is used in Article XIII B of the California Constitution, the disbursement of these proceeds is not subject to the limitations imposed by that article.
2704.21. Norwithstanding any provision of the State General Obligation Bond Law with regard to the proceeds from the sale of bonds authorized by this chapter that are subject to investment under Article 4 (commencing with Section 16470) of Chapter 3 of Part 2 of Division 4 of Title 2 of the Government Code, the Treasurer may maintain a separate account for investment earnings, order the pajment of those earnings to comply with any rebate requirement applicable under federal law, and may otherwise direct the use and investment of those proceeds so as to maintain the tax-exempt status of those bonds and to obtain any other advantage under federal law on behalf of the funds of this state.

## PROPOSITION 2

This initiative measure is submitted to the people in accordance with the provisions of Article II, Section 8, of the California Constitution.

This initiative measure adds sections to the Health and Safety Code; therefore, new provisious proposed to be added are printed in italic type to indicate that they are new.

## PROPOSED LAW

## SECTION I. SHORT TITLE

This act shall be known and may be cited as the Prevention of Farm Animal Cruelty Act.

SECTION 2. PURPOSE
The purpose of this act is to prohibit the cruel confinement of farm animals in a manner that does not allow them to turn around frecly. lie down, stand up, and fully extend their limbs.

## SECTION 3. FARM ANIMAL CRUELTY PROVISIONS

Chapter 13.8 (commencing with Section 25990) is added to Division 20 of the Health and Safety Code, to read:

Chapter I3.8. Farht Animal Cruelty
25990. Prohibitions. In addilion to other applicable provisions of law; a person shall not ieiher or confine any covered animal, on a farm, for all or the majority of any day, in a manner that prevents such animal from:
(a) Lying down, standing up, and fully extending his or her limbs; and
(b) Turning around freely:
25991. Denmitions. For the purposes of this chapter, the following terms have the following meanings:
(a) "Calf raised for veal" means any' calf of the bovine species kept for the purpose of producing the food product described as veal.
(b) "Covered animal" means any' pig during pregnancy, calf raised for veal, or egg-laying hen who is kept on a farm.
(c) "Egg-laying hen" means any female domesticated chicken, twrkey, duck, goose, or guinea fowl kept for the purpose of egg production.
(d) "Enclosure" means any cage, crate, or other structure (inchrding what is commonly described as a "gestation crate" for pigs; a "veal crate" for calves; or a "battery cage" for egg-laying hens) used to confine a covered animal.
(e) "Farm" means the land, building, supportfacilities, andother equipment that are wholly or partially used for the commercial production of animals or animal products used for food or fiber; and doess not include live animal murkels.
(f) "Frully extending his or her limbs" means fully' extending all limbs without touching the side of an enclosure, inchrding, in the case of egg-laying hens, filly spreading both wings without touching the side of an enclosure or other egg-lcring hens.
(g) "Person" means ang' individual. firm, partnership. joint venture, ussociation, limited liability' company, corporation, estate, trust, receiver, or syndicate.
(h) "Pig churing pregnancy" means any' pregrant pig of the porcine species kept for the primary purpose of breeding.
(i) "Turning around freely" means turning in a complete circle without any impediment, including a tether, and without louching the side of an enclosure.
25992. Exceptrows. This chapter shall not apply:
(a) During scientific or agricultural research.
(b) During examination, testing, individual treatment or operation for veterinary purposes.
(c) During transportation.
(d) During rodeo exhibitions, state or county fair exhibitions, 4-H programs, and similar exhibitions.
(e) During the slaughter of a covered animal in accordance with the provisions of Chapter 6 (commencing with Section 19501) of Part 3 of Division 9 of the Food and Agricultural Code, relating to humane methods of slaughter; and other applicable law and regulations.
(f) To a pig during the seven-day period prior to the pig's expected date of giving birth.
25993. Enforcement: Any person who violates any of the provisions of this chapter is guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not to exceed one thonsand dollars ( $\$ 1,000$ ) or by imprisonment in the county jail for a period not to exceed 180 days or by both such fine and imprisonment.
25994. Construction of Chapter.

The provisions of this chapter are in addition to, and not in lieu of, any other laws protecting animal welfare, including the California Penal Code. This chapter shall not be construed to limit any state law or regulations protecting the welfare of animals, nor shall anvthing in this chapter prevent a local governing body from adopting and enforcing its own animal welfare laws and regulations.

## SECTION 4. SEVERABILITY

If any provision of this act, or the application thereof to any person or circumstances, is held invalid or unconstitutional, that invalidity or unconstitutionality shall not affect other provisions or applications of this act that can be given effect without the invalid or unconstitutional provision or application, and to this end the provisions of this act are severable.

SECTION 5. EFFECTIVE DATES
The provisions of Sections 25990, 25991, 25992, 25993, and 25994 shall become operative on January $1,2015$.

## PROPOSITION 3

This initiative measure is submitted to the people in accordance with the provisions of Article II, Section 8, of the California Constitution.

This initiative measure adds sections to the Health and Safety Code; therefore, new provisions proposed to be added are printed in italic type to indicate that they are new.

## PROPOSED LAW

SECTION 1. Part 6.1 (commencing with Section 1179.50) is added to Division 1 of the Health and Safety Code, to read:

## PART 6.1. CHILDREN'S HOSPITAL BOND ACT OF 2008

C'hapter 1. Generil Provisions
1/79.50. (a) This part shall be known and may be cited as the Children's Hospital Bond Act of 2008.
(b) Califormia's network of regional children's hospitals provide vilal health care senvices to children facing life-threatening illness or injury: Over one million times each year, children are cared for al these hospitals without regard to their family's ability to pay.
(c) Children's hospitals also provide specialized treatment and care that has increased the survival of children suffering from serious diseases and illnesses such as childhood leukemia, cancer, heart defects, diabetes, sickle cell anemia, and cystic fibrosis.
(d) Children's hospitals also provide essential training for pediatricians, pediatric specialists and others who treat children, and they conduct critically. important medical research that benefits all of California's children.
(e) However, the burden of providing uncompensated care and the increasing costs of health care seriously impair our children's hospitals' ability to modernize and expand their facitities and to purchase the latest medical technologies and special medical equipment necessayy to take care of sick children.
(f) Therefore, the people desire to provide a steacty and ready source of funds for capital improvement programs for children's hospitals to improve the health, welfare, and safety of Califomia's children.
1179.51. As used in this part, the following terms have the following meanings:
(prices in dollars per carton)

|  |  | THIS WEEK |  |  |  | PREVIOUS WEEK |  |  |  | PREVIOUS YEAR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feature Rate |  | 54.3\% of 18,600 stores |  |  |  | $34.6 \%$ of 18,600 stores |  |  |  | 39.5\% of 18,000 stores |  |  |  |
|  |  | X LARGE |  | LARGE |  | XLARGE |  | LARGE |  | XLARGE |  | LARGE |  |
|  |  | Stores | Avg | Stores | Avg | Stores | Avg | Stores | Avg | Stores | Avg | Stores | Avg |
| $R$ $E$ $G$ $U$ | USDA GRADE AA <br> White 12 pack <br> White 18 pack <br> Brown 12 pack | 30 | 0.94 | $\begin{array}{r} 1,530 \\ 80 \end{array}$ | $\begin{aligned} & 1.09 \\ & 1.49 \end{aligned}$ | 10 | 1.29 | $\begin{aligned} & 610 \\ & 480 \end{aligned}$ | $\begin{aligned} & 1.02 \\ & 1.96 \end{aligned}$ | 20 | 1.51 | $\begin{array}{r} 2,140 \\ 490 \end{array}$ | $\begin{aligned} & 1.17 \\ & 2.05 \end{aligned}$ |
| L | USDA GRADE A <br> White 12 pack <br> White 18 pack <br> Brown 12 pack | 130 | 0.91 | $\begin{array}{r} 2,940 \\ 1,240 \\ 60 \end{array}$ | $\begin{aligned} & 0.96 \\ & 1.46 \\ & 1.17 \end{aligned}$ | 240 | 1.02 | $\begin{array}{r} 2,770 \\ 530 \end{array}$ | $\begin{aligned} & 0.96 \\ & 1.28 \end{aligned}$ | 20 | 1.19 | $\begin{aligned} & 750 \\ & 150 \end{aligned}$ | $\begin{aligned} & 1.09 \\ & 2.79 \end{aligned}$ |
| S | USDA ORGANIC White 12 pack Brown 12 pack |  |  | 860 | 4.00 |  |  | 220 | 4.30 |  |  | 130 | 4.25 |
| E | OMEGA-3 <br> White 12 pack <br> Brown 12 pack | 160 | 2.00 | $\begin{array}{r} 1,390 \\ \quad 270 \\ \hline \end{array}$ | $\begin{aligned} & 2.53 \\ & 3.40 \\ & \hline \end{aligned}$ | 30 | 2.16 | $\begin{array}{r} 1,250 \\ 130 \\ \hline \end{array}$ | $\begin{array}{r} 2.55 \\ 3.49 \\ \hline \end{array}$ | 290 | 2.78 | 1,460 | 2.78 |
| $\begin{aligned} & \mathrm{A} \\ & \mathrm{~A} \\ & \mathrm{~T} \end{aligned}$ | CAGE-FREE <br> White 12 pack <br> Brown 12 pack |  |  | $\begin{array}{r} 80 \\ 1,140 \\ \hline \end{array}$ | $\begin{array}{r} 2.99 \\ 2.89 \\ \hline \end{array}$ |  |  | $\begin{aligned} & 330 \\ & 780 \\ & \hline \end{aligned}$ | $\begin{array}{r} 2.71 \\ 2.83 \\ \hline \end{array}$ |  |  | $\begin{aligned} & 170 \\ & 810 \\ & \hline \end{aligned}$ | $\begin{array}{r} 3.39 \\ 2.63 \\ \hline \end{array}$ |
| Y | VEGETARIAN FED White 12 pack Brown 12 pack | 140 | 2.50 | $\begin{aligned} & 460 \\ & 700 \end{aligned}$ | $\begin{array}{r} 2.48 \\ 2.59 \\ \hline \end{array}$ |  |  | 230 30 | $\begin{array}{r} 2.99 \\ 2.50 \\ \hline \end{array}$ |  |  |  |  |


| Activity: Summary | THIS WEEK | LAST WEEK | YEAR AGO | INVENTORY 5/; |
| :--- | :---: | :---: | :---: | :---: |
| Regular | 6,010 | 4,640 | 3,570 | Large Eggs on |
| Specialty | 5,200 | 3,000 | 2,860 | May-25-2009 |
| Total (includes MD) | 11,380 | 7,640 | 6,470 | 435.0 |
| Special Rate 41: | $15.7 \%$ | $4.1 \%$ | $9.5 \%$ | up 1\% |

SHEEE EGGAndEGGPRODUCTS FEATURING
A sharp increase in outlets featuring all pack sizes near the end of the ad cycle helped to push regular shell egg feature activity dramatically higher than a week ago. The average ad price for Grade A, Large white eggs to consumers is only 1 cent more than last week. Stores conducting "combination" promotions (free eggs with bacon purchase) caused a substantial increase in the rate of "no price" specials. Medium eggs are becoming more common. Specialty shell egg promotions are also up considerably compared to a week ago. Omega-3 white eggs continues dominating this sector, while Cage-free brown eggs follow close behind. In the egg products sector, liquid egg featuring is more activity than in recent weeks.

This Week's Shell Egg Featuring by Category


All report information gathered from publicly available sources including store circulars, newspaper ads, and supermarket websites.
1/: FEATURE RATE: the amount of sampled stores advertising any consumer grade of shell eggs during the current week, expressed as a percentage of the total sample. 2/: AcTiviTy inDEX: a measure of the absolute frequency of feature activity equal to the total number of stores for each advertised consumer grade of shell egg. (e.g., a retailer featuring XL and LG eggs in 100 stores would have an activity index of 200.) 3/: STORES/AVG: the total number of advertising outlets and the weighted average price weighted by the respective number of outlets. 4/: SPECIAL RATE: the percentage of sampled stores with a no-price promotion (e.g., buy 1, get 1 free, etc.) Source: USDA Agricultural Marketing Service, Poultry Market News and Analysis - (202) 720-6911 website: http://www.ams.usda.gov/pymarketnews.htm

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 (prices in dollars per carton)


[^4]
## Examples of Prop 2 Opponents' Statements

Promar International, "Economic Impact on California of the Treatment of Farm Animals Act," May 16, 2008:

- "The central problem with the proposed measure is that, as written, it effectively bans almost all commercial egg production in the state as of 2015, including both modern cage housing and the existing cage-free housing."
- "The cost of current cage-free production methods, many of which effectively would be outlawed by the proposed measure, is at least $25 \%$ higher than for modern cage housing production."
- "Chickens have wingspans of up to 28 inches when both are extended. Therefore, $\underline{a}$ reasonable interpretation of the practical effect of the language in the initiative is that each hen, whether caged or cage-free, would be required to have a minimum of 784 square inches of space ( $28 \times 28$ ) which is 5.4 square feet. Such a requirement would make almost all of California's egg production uneconomical, for reasons discussed in the next section, and would outlaw current density levels permitted in cage-free and organic laying houses."

Mench, Joy A, and Daniel Sumner, "Economic Effects of Proposed Restrictions on Egg-laying Hen Housing in California," University of California Agricultural Issues Center, July 2008:

- "The specific wording of the initiative is imprecise. Nonetheless, informed expectations and careful assessments are that, if passed, the resulting regulations would eliminate the use of cage systems for laying hens in California and may be even more restrictive."
- "... the elimination of the cage housing system in California alone would not affect how the eggs consumed in California would be produced."
- "... this study has considered only the economic implications of regulations that would eliminate the use of cage housing systems for egg production in California."
- "Conventional cages would thus be banned under the California initiative."
- "... if the initiative is interpreted to mean that at least one hen at a time is able to wing flap, then the current space allowances in typical non-cage systems will allow this. It should be noted that this interpretation represents the probable minimum necessary adjustments for producers to comply with the initiative. Regulations based on the
initiative would be very unlikely to permit less space per hen than that available under the currently accepted stocking densities for non-cage production. However, it may be that the initiative would be interpreted as requiring significantly more space per hen, to the point that free-range production would be the only system capable of meeting its provisions. Below we focus on the non-cage systems, but note that the more restrictive interpretation is possible and would raise costs of production by even more than would a shift to current non-cage systems."

Californians for Safe Food, Press Release, "Reports of Bird Flu Outbreak in Idaho a Wake Up Call for California," September 9, 2008:

- "The infected birds in Idaho were kept in an uncontrolled, outdoor area that allowed for increased exposure to migratory birds which are known to carry the Bird Flu virus. This environment is similar to the one proposed by the proponents of Prop. 2," said Julie Buckner, spokeswoman for Californians for SAFE Food. "Prop. 2 recklessly bans the modern, sanitary and clean housing systems used by most California egg farmers and instead mandates a system that hazardously exposes egg-laying hens in California to direct contact with migratory birds from out-of-state and overseas which undermines our public health and safety."

Californians for Safe Food, Press Release, "New Study Confirms Prop. 2's Health and Food Safety Risks; More Unions Join Fight to Oppose," September 22, 2008:

- "However well-intentioned, Proposition 2 is risky, dangerous and, from a food safety and public health perspective, scientifically unfounded," noted Dr. Arthur Bickford. "The proponents of Proposition 2 say it is a 'modest' measure, but quite the opposite is true. It is wide-sweeping, onerous and extreme. By arbitrarily altering space configurations on California egg farms, Proposition 2 effectively bans all egg production in California."

Notes from Dr. Joy Mench guest lecture in UC Davis Animal Science course, posted online, October 24, 2008:

- "THE SYSTEM NOW: 95\% of egg producers in CA use battery cages, which are rows of cages that house $5-10$ hens each and do not meet prop 2 requirements. Hens CAN turn around and lie down in battery cages, but prop 2 requires the cages to be big enough for a hen to fully extend her wings and not touch another hen or the cage. A hen's wingspan is about 30-32 inches, which is REALLY long. If prop 2


## was passed, producers would not be able to afford housing hens in such large cages and would most likely go cage-free.

- "THE SOLUTION (that prop 2 does NOT allow!): Since I don't like cage-free nor battery cages, what do I prefer? I prefer furnished cages (see picture), which are popular in Europe (due to their different requirements than US). Furnished cages are like battery cages but bigger and, like the name suggests, come furnished with nest boxes, something for the hens to perch on, and bedding or wood chips for dust-bathing. Furnished cages address the behavioral issues / limitations that battery cages have, yet still maintain the sanitation level of the battery cages (unlike cage-free). Furnished cages are like a hybrid between battery cages and cage-free. Now, the big issue about furnished cages and prop 2: although furnished cages are bigger then battery cages, they are still NOT big enough to meet the requirements of prop 2. Furnished cages are not big enough for a hen to fully extend both of her wings and not touch another hen or the cage. If prop 2 passes, FURNISHED CAGES WILL NOT BE ALLOWED IN CALIFORNIA! No, egg producers in CA do not used furnished cages now, but if prop 2 passes, they will be even LESS likely to use furnished cages since it would be against the law...."

CA Secretary of State, "Argument Against Proposition 2, Official Voter Information Guide, General Election, November 2008:

- "...lt is so EXTREME that it also effectively bans "cage-free" eggs, forcing hens outdoors for most of the day.
- "This outdoor access enhances the likelihood that such poultry will have direct contact with migratory and wild birds as well as other animals, substantially increasing the risk of Avian Influenza, Exotic Newcastle Disease, and other diseases." - UNITED STATES ANIMAL HEALTH ASSOCIATION"

Californians for Safe Food, Press Release, "Tell Your Friends, Family and Neighbors - Vote NO on Prop 2 Tomorrow!" November 3, 2008:

- "Banning these systems would also expose hens to migratory birds, known to be carriers of Avian Influenza, or Bird Flu."

Statement, United Egg Producers, November 5, 2008:

- Because the wording of Prop. 2 is so vague, the state of California will have to determine how this new law actually will be implemented and enforced when it comes into effect six years from now. Proponents of Prop. 2 have said publicly during the campaign that
it was not their "intent" to ban cage free production. Will they be true to their word when it comes time for the state to implement Prop. 2?
"United Voices," United Egg Producers, November 11, 2008:
- "Cages for laying hens and sow gestation crates will certainly be outlawed and maybe other forms of egg production systems."
- "I see no way California egg farmers can compete with out-of-state or out-of-country eggs unless the state legislature puts forth a law that prohibits cage eggs from being sold in the state." [Gene Gregory, President, United Egg Producers]


## Examples of Prop 2 Proponents' Statements

The Humane Society of the United States, Press Release, "Signature Gathering Begins for California Anti-Cruelty Measure," October 1, 2007:

- The Prevention of Farm Animal Cruelty Act provides basic protections requiring that animals be able to turn around and extend their limbs. It will prevent the use of inhumane factory farming practices such as keeping animals confined in small crates or cages-specifically, veal crates for calves, battery cages for egg-laying hens, and gestation crates for breeding pigs.

Californians for Humane Farms, Press Release, "Californians for Humane Farms Calls Economic Study Classic Bait and Switch—Californians Can Afford To Treat Animals Humanely," May 22, 2008:

- "The fact is, the Prevention of Farm Animal Cruelty Act is a modest reform that won't be costly to implement," said Jennifer Fearing, the chief economist for The Humane Society of the United States. "The egg industry's own California-based economist reports that switching to cage-free eggs costs producers less than one penny per egg more than eggs laid by hens crammed into tiny wire cages."

Newman, Matthew and Tim Gage, "Fiscal and Economic Implications of Proposition 2," September 16, 2008:

- "Specifically, the measure requires that these animals be able to turn around freely, lie down, stand up, and fully extend their limbs. The measure gives producers six years to adjust their production methods to these requirements. For purposes of analysis, this report assumes, as other researchers have, that producers will have the ability to choose between a range of cage-free options, including barns, aviaries, free-range, and organic systems in order to comply with the measure's requirements."
- "Producers have severai housing options to choose between including cage-less barns, aviaries, free-range systems, or organic systems. Non-cage barn systems allow birds to move freely indoors, provide nest boxes and often perches. Single-level barns may be designed with deep litter or perforated flooring while multi-level barns, or aviaries, utilize the vertical space within the building to allow hens to move within multiple levels. Free-range systems combine barns with outdoor access. Organic systems combine cage-free housing with organic feed mandates and antibiotic use restrictions."


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## Causes of mortality in laying hens in different housing systems in 2001 to 2004

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> Oddvar Fossum (oddvar.fossum@sva.se)
> Desiree S Jansson (desiree.s.jansson@sva.se)
> Pernille Engelsen Etterlin (pernille.engelsen@sva.se)
> Ivar Vagsholm (ivar.vagsholm@sva.se)

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[^5]
[^0]:    *Dr. Shields received her Ph.D. in Animal Behavior from the University of California at Davis and serves as a consulting farm animal welfare scientist for the Humane Society of the United States.
    ${ }^{\dagger}$ Dr. Duncan is the Emeritus Chair in Animal Welfare at the University of Guelph, Ontario, and an internationally renowned expert on farm animal welfare science.

[^1]:    ${ }^{\ddagger}$ In-depth analysis of every disease that may affect cage and cage-free systems is not possible in this report, given the vast scope of such an evaluation, which is made more challenging given the limited disease reporting from individual farms. As such, only general disease considerations and the most commonly cited disease issues discussed in the debate over laying hen welfare are included herein.

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[^4]:    Note: See page 1 for explanatory notes.

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