

DAVID Y. IGE
Governor

JOSH GREEN
Lt. Governor



PHYLLIS SHIMABUKURO-GEISER
Chairperson, Board of Agriculture

MORRIS M. ATTA
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
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TESTIMONY OF PHYLLIS SHIMABUKURO-GEISER
CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON AGRICULTURE

MARCH 18, 2022
9:00 A.M.
ROOM 325 AND VIDEOCONFERENCE

SENATE BILL NO. 2195 SD2
RELATING TO FOWL

Chairperson Hashem, Vice-chair Perruso, and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill 2195 SD2. This bill seeks to establish a 5-year pilot program within the Department of Health to eradicate feral chickens in the State. The bill also requires the Department of Agriculture (Department) to submit a special local need (SLN) registration to the United States Environmental Protection Agency. The Department offers comments on this bill.

To ensure proper application and adherence to the label of any pesticide, the Department completes inspections of applicators for SLN registrations. An increase in staffing time devoted to this process will be required and may decrease other areas of pesticide related enforcement. The Department will enforce all rules pertaining to label requirements on any contractor or direct Department of Health staff applying the pesticide for the pilot project as required by State statute.

The use of OvoControl requires an automatic wildlife-feeder which is programmed to trigger once a day, and routine checking of that feeder to ensure only the target bird species feed from the bird feeder. Labeled and targeted species control include Pigeons (*Columba livia*, Rock Dove, Feral Pigeons) and Common Mynas (*Acridotheres tristis*). In Hawaii, the label allows for non-target species to consume the bait. Those species are



Zebra Doves (*Geopelia striata*) and Mountain Doves (*Spilopelia chinensis*). The label also notes that feeders are preferably placed on a rooftop, but may also be placed on a flat, paved or concrete surface. The feeders may not be placed in any other location except those mentioned in the label. All bait must also be consumed within 15 minutes of application to ensure no non-target wildlife are affected by the feeding.

Additional label requirements include contact with the Department of Land and Natural Resources (DLNR) to obtain a Wildlife Control Permit if one is required. Applications are prohibited in areas where Nene ground (*Nesochen sandvicensis*), Hawaiian coot (*Fulica alai*), Hawaiian moorhen (*Gallinula chloropus sandvicensis*), and Hawaiian duck (*Anas wyvilliana*) are known to occupy or graze. Users must notify the Pesticides Branch of the Department of Agriculture, in writing prior to use. Two weeks advance notice must be given to allow time for consultation with Hawaii DLNR and U.S. Fish and Wildlife Service.

The Department offers added information for decision making; Chickens do not naturally congregate and feed like the intended pests of OvoControl. Several peer reviewed articles note that semi-feral chickens will continue to forage even when fed regularly, and when given a choice, hens preferred to find their own food rather than take freely from a feeder, a phenomenon called “contra free-loading”. Success depends on consistent feeding of the bait. The active ingredient does not permanently sterilize the chickens, rather the process is entirely reversible, if chickens do not feed on the bait continuously, they will begin to produce viable eggs in approximately 2-4 weeks.

A Feral Chicken Management Plan, completed by the Government of Bermuda, Ministry of Environment and Planning, Department of Conservation Services was drafted and implemented in November of 2013. The primary recommendation of the plan provided for a chemical control of feral chickens using Alphachloralose paste which incapacitates birds and allows for selective removal of pest birds. No update from the management plan is currently available online to verify results of the plan.

Thank you for the opportunity to testify on this measure.

SB-2195-SD-2

Submitted on: 3/17/2022 3:05:27 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Greg Takeshima	Hawaii Department of Agriculture	Comments	Remotely Via Zoom

Comments:

I am available to answer any questions on behalf of the Department of Agriculture.

DAVID Y. IGE
GOVERNOR



CRAIG K. HIRAI
DIRECTOR

GLORIA CHANG
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF BUDGET AND FINANCE
P.O. BOX 150
HONOLULU, HAWAII 96810-0150

EMPLOYEES' RETIREMENT SYSTEM
HAWAII EMPLOYER-UNION HEALTH BENEFITS TRUST FUND
OFFICE OF THE PUBLIC DEFENDER

ADMINISTRATIVE AND RESEARCH OFFICE
BUDGET, PROGRAM PLANNING AND
MANAGEMENT DIVISION
FINANCIAL ADMINISTRATION DIVISION
OFFICE OF FEDERAL AWARDS MANAGEMENT (OFAM)

WRITTEN ONLY
TESTIMONY BY CRAIG K. HIRAI
DIRECTOR, DEPARTMENT OF BUDGET AND FINANCE
TO THE HOUSE COMMITTEE ON AGRICULTURE
ON
SENATE BILL NO. 2195, S.D. 2

March 18, 2022
9:00 a.m.
Room 325 and Videoconference

RELATING TO FOWL

The Department of Budget and Finance (B&F) offers comments on this bill.

Senate Bill No. 2195, S.D. 2, establishes a five-year feral chicken eradication pilot program (FCEPP) within the Department of Health (DOH); requires the Department of Agriculture to submit a special local need registration to the United States Environmental Protection Agency for the use of OvoControl; requires DOH to submit an annual report to the Legislature on the expenditure of funds for the FCEPP and its efficacy of eradicating feral chickens; and appropriates an unspecified amount in general funds in FY 23 to DOH for the FCEPP.

B&F notes that, with respect to the general fund appropriation in this bill, the federal Coronavirus Response and Relief Supplemental Appropriations Act requires that states receiving Elementary and Secondary School Emergency Relief (ESSER) II funds and Governor's Emergency Education Relief II funds must maintain state support for:

- Elementary and secondary education in FY 22 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and

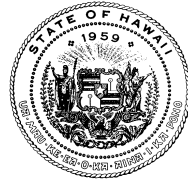
- Higher education in FY 22 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

Further, the federal American Rescue Plan (ARP) Act requires that states receiving ARP ESSER funds must maintain state support for:

- Elementary and secondary education in FY 22 and FY 23 at least at the proportional level of the state's support for elementary and secondary education relative to the state's overall spending, averaged over FYs 17, 18 and 19; and
- Higher education in FY 22 and FY 23 at least at the proportional level of the state's support for higher education relative to the state's overall spending, averaged over FYs 17, 18 and 19.

The U.S. Department of Education has issued rules governing how these maintenance of effort (MOE) requirements are to be administered. B&F will be working with the money committees of the Legislature to ensure that the State of Hawai'i complies with these ESSER MOE requirements.

Thank you for your consideration of our comments.



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. Box 3378
Honolulu, HI 96801-3378
doh.testimony@doh.hawaii.gov

**Testimony in OPPOSITION to SB2195 SD2
RELATING TO FOWL**

REPRESENTATIVE MARK J. HASHEM, CHAIR
HOUSE COMMITTEE ON AGRICULTURE

Hearing Date: 3/18/2022

Room Number: Videoconference

1 **Fiscal Implications:** Unspecified general fund appropriation.

2 **Department Testimony:** The Department of Health respectfully opposes SB2195 SD2 due to
3 the unsubstantiated threat to public health, and the lack of resources and expertise with the
4 department.

5 Chapter 322, Hawaii Revised Statutes (HRS) authorizes the DOH to respond to complaints of
6 nuisance, odor, and filth and to abate the situation. There has been no record of disease outbreak
7 documented in Hawaii due to proximity to or transmission from feral chickens. As a result, this
8 does not meet the legal standard defined in section 322-1, HRS, for nuisance abatement that, in
9 the opinion of the DOH, is “dangerous or injurious to health.” Furthermore, feral chickens can
10 neither be classified as a vector hazard, pursuant to Hawaii Administrative Rule 11-26-83:

11 *“Imminent Vector Hazard: means an existing severe vector situation which in the opinion of the*
12 *director can seriously impair the health, safety, or well-being of an individual or the public if not*
13 *immediately abated.”*

14 While we concur that feral chicken populations must be controlled, the DOH is not the
15 appropriate agency for animal eradication, sterilization, and control. There are more appropriate
16 agencies with the knowledge and expertise to handle feral animal control.

17 The Department of Health, Vector Control Branch, which would be tasked with carrying out this
18 measure, if enacted, does not possess the personnel, equipment, resources, and expertise. A

1 conservative estimate of funds needed to accomplish the goals of SB2195 SD2 would be
2 approximately \$500,000. This includes hiring a dedicated FTE to plan, develop, implement and
3 manage a five-year pilot project, to coordinate with multiple agencies, to potentially hire
4 contractors and to manage operating expenses. This investment is unwise since the measure
5 limits feral chicken eradication to Pearl City and Aiea.

6

7 Thank you for the opportunity to testify on this measure.

SB-2195-SD-2

Submitted on: 3/16/2022 10:30:42 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Robert Wilkinson	JULIE PEINE TRUST	Support	Written Testimony Only

Comments:

On behalf of the Julie Peine Trust, which owns and manages multiple property rentals throughout the State, I strongly support SB2195 regarding the need to eradicate feral fowl.

The feral chicken and rooster population in Hawaii has skyrocketed and the only meaningful way to correct the issue is by eradication. Although some have proposed a type of birth control for the feral fowl problem, this approach does not protect other birds, such as mynahs, shama from inadvertently eating the food and being adversely impacted.

Further, the feral fowl problem has reached a point where they are a serious noise nuisance and continue to create extensive property damage by their foraging efforts.

Please support and pass SB2195 and take immediate steps to implement an eradication program!

Thank you.

Robert Wilkinson

Julie Peine Trust

SB-2195-SD-2

Submitted on: 3/16/2022 11:49:04 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Henry & Gloria Ortiz	Mo'Bettah Handyman Services	Support	Written Testimony Only

Comments:

We strongly support the passage of SB2195.

Having been born and raised here in the islands, we've seen in recent years our local communities go from being green and beautiful, to now many residential areas, parks, roadways of having serious destruction of native plants and shrubs due to the explosion of the feral fowl population on Oahu and on Kauai.

The feral chickens crow and cackle day and night, making it impossible to get a good nights rest or sleep. Further, yards, gardens, easements, etc. are repeatedly damaged by the feral fowl and private efforts to control or to mitigate the damage has been without success.

From our business perspective, we've had a significant increase in calls from locals residents in need of having areas powerwashed to remove the feral fowl droppings, needed repairs to garden walls and edges damaged by feral fowl foraging, and the need for painting areas damaged by the feral chickens and roosters.

The only viable solution to reverse the damages caused by the feral fowl, including the roadway safety hazards and noise pollution, is by a dedicated effort to eradicate the feral fowl.

This bill is several years overdue and we urge you to approve and pass this bill immediately!

Thank you!

Henry and Gloria Ortiz

Mo'Bettah Handyman Services



SAVE HAWAII CHICKENS

People are testifying in support of the bill because they think this will resolve issues with the rooster in the backyard keeping them up at night, but the bill is not really being truthful to residents and their complaints. There is no way to bring this drugged birdseed to every neighborhood in Hawaii.

Simply going by the claims and intent of this bill, it's an absolute guaranteed set up for failure.

You may have noticed, chickens are not a breed, like canadian geese or mallard ducks, that are flying to areas with bait. To "eradicate" chickens from Hawaii you would need to use this drugged OvoControl bird seed every block or acre. Is that the plan? How many millions of dollars will it cost?

The DRUGGED BIRD FEED must be used on concrete, completely dry covered areas, with no moisture or rain. It CAN contaminate soil, invertebrates, and water sources. Someone must observe the feeding and after the feeding remove everything to prevent non-target species? WHO WILL BE DOING THIS? And is it like pigeons, where you need to do application for 365 days in each area for it to be effective? (see attached)

The Department of Health has made it clear they oppose the bill and do not have the resources to accomplish this monumental task. (Please also see attached for their testimony in 2014 re: issues with the use of this drug, including application, native birds like nene possibly eating the pellets, studies on dosage, dangers to humans who may consume feral birds and eggs).

This would be another rail-like sinkhole for taxpayer funds) and inevitably the chicken populations return because you're covering an ENTIRE STATE which is absolutely impossible.

It may make sense when the drug is used for Canadian Geese around airports for example, but not for the intent here.

Another thing to note, the drug is only used in SPRING for Geese, because of their breeding cycles, but also because **OvoControl can reduce a bird's ability to dissipate heat when environmental temperatures and humidity are high** (as they are in Hawai'i), causing increased sensitivity to heat stress and even mortality.

The EPA (at least as of 2013) does not allow its use in Guam, American Samoa, Northern Mariana Islands, Puerto Rico, or the US Virgin Islands? Why not include Hawaii? Do they think the urbanized areas Honolulu are reflective of the ENTIRE STATE?

This bill went from specific areas on Oahu to suddenly covering all Hawaii. Do you seriously think you are making a dent in chicken populations without negatively impacting nene geese or koloa ducks on Kaua'i, who reside in the same areas? First this drug is supposed to be used in urban areas only with 50,000 population. This bill absolutely ignores how this drug would be used on outer islands.

Before we switch this bill back to costly catch and kill programs, these already been tried with no positive long term results. The thing in common with these efforts is they never seem to address issues like cockfighting operations and the dumping of birds. *It's not the chicken's fault!*

And the minute you say chickens are up for kill, people will abuse, murder, torture them. We have witnessed this.

Red Junglefowl (especially strong in feral chickens on Kaua'i) is revered and could be essential for the rescue of commercial chicken breeds. (see attached)

"It is crucial that we identify and conserve the genetic

variation that still remains in the Red Junglefowl [on Kaua'i]. This variation could soon be essential for the improvement or evolutionary rescue of commercial chicken breeds," says Eben Gering, PhD, Michigan State University, Department of Zoology

Many locals and tourist love Hawaii's chickens. Hawai'i has become known for their beloved chickens; people joke they're the state bird. Songs, art, crafts, tees, postcards, entire businesses devoted to them. This is especially the case on Kaua'i. Visitors can't wait to come back and see them.

CAN WE THINK OUTSIDE THE BOX?

Hawai'i leaders have been touting their efforts to become more sustainable. Fact is, Hawaii's feral chicken eggs are some of the most delicious eggs you may ever eat. And the most sustainable means of population control with chickens is not drugging them to destroy their eggs, but instead harvesting, selling, and eating their eggs.

A more holistic approach would be cultivating rather than scheming to end this breed. Hawai'i could use allocated funds to establish well-needed bird sanctuaries and locally organized chicken programs on each island.

There are more efficient, eco-conscious ways to manage the feral chicken population in Hawai'i instead of trying to "eradicate" them.

Mahalo

We the undersigned do not support SB2195 or any bill that aims to "eradicate" feral chickens in Hawai'i through drugged bird seed or other methods.

Table 1

Name	City	State	Postal Code	Country	Signed On
DEAN BRANDT	Hilo	HI	96720	US	2022-03-15
Jonas Armenta	Tucson	AZ	85713	US	2022-03-15
Patrick Coan	Kilauea	HI	96754	US	2022-03-15
Monique Parrish	Wahiawa	HI	96786	US	2022-03-15
Israa M	Gîza			Egypt	2022-03-15
Jessica Epstein	Staten Island	NY	10305	US	2022-03-15
Ashley Bans	Gresham	OR	97080	US	2022-03-15
Roshni Bans	Gresham	OR	97080	US	2022-03-15
Daisy Parrish	Honolulu	HI	96818	US	2022-03-15
Jocelyn Duran	Balch Springs		75180	US	2022-03-15
Gina Siska	Severna Park	MD	21146	US	2022-03-15
Joseph Delesky	Jersey City	NJ	7307	US	2022-03-15
Courtney Jones	Minneapolis	MN	55422	US	2022-03-15
Nicole Shuman	Sacramento	CA	95826	US	2022-03-15
Paulina Niechcial	Vernon		V1T	Canada	2022-03-15
Randy Rudolph	Audubon	IA	50025	US	2022-03-15
Cindi Fontanilla	Kalaheo	HI	96741	US	2022-03-15
Alex D.	Jersey City	NJ	7305	US	2022-03-15
Alverdes Attalia	Kapaa	HI	96746	US	2022-03-15
Tonya Meyer	Portland	OR	98642	US	2022-03-15
Rafael Zamora	Santa Rosa	CA	95403	US	2022-03-15
Hailey Wilson	Valley City	OH	44280	US	2022-03-15
Timothy O'Rourke	Kilauea	HI	96754	US	2022-03-15
Maryam Nilu	Alliston		L9R	Canada	2022-03-15
Jay Colgan	Portland	OR	97202	US	2022-03-15
Nicole fitzgerald	Kapaa	HI	96746	US	2022-03-15
Isaias Castillo	Brighton	CO	80601	US	2022-03-15
Beverly Fasanella	Kilauea	HI	96754	US	2022-03-15
Elizabeth Ostermann	Disputanta	VA	23842	US	2022-03-15

Jenny Anastasi	Eureka	CA	95501	US	2022-03-15
Candise Henry	Durham	NC	27707	US	2022-03-15
Daniela Kim	CABA		1406	Argentina	2022-03-15
Ted Za	Kapaa	HI	96746	US	2022-03-15
Shelagh Cummings	Summerland Key	FL	33042	US	2022-03-15
Martín Jiménez	CABA		1406	Argentina	2022-03-15
Autumn Monnahan	Wildomar	CA	92595	US	2022-03-15
Bryan Rosado	Clermont	FL	34711	US	2022-03-15
Chelle Kamimoto	Honolulu	HI	96819	US	2022-03-15
Nicoel Correia	Portland	OR	97229	US	2022-03-15
Taylor Sheppick	Salt Lake City	UT	84129	US	2022-03-15
Puttiporn Akrachalanon	Bangkok			Thailand	2022-03-15
Naga Jayanthi Varikuti	Hyderabad		500044	India	2022-03-15
Bailey P	Yucca Valley	CA	92284	US	2022-03-15
Daniel Padilla	El paso	TX	79936	US	2022-03-15
Jessica Simmons	Waianae	HI	96792	US	2022-03-15
Kiana Sanchez	Honolulu	HI	96808	US	2022-03-15
Ramona Kauahi	Kailua-Kona	HI	96740	US	2022-03-15
Laura Pedersen	San Rafael	CA	94901	US	2022-03-15
Francisca Matamala	Santiago			Chile	2022-03-15
Renee DiCesare	Victorville	CA	92392	US	2022-03-15
Aleeah Stephenson	Tucson	AZ	85745	US	2022-03-15
Kimberly Kaauwai				Finland	2022-03-15
Lynn Matsumura	Kaneohe	HI	96744	US	2022-03-15
Marissa Emoto-Tsuda	Honolulu	HI	96819	US	2022-03-15
Lauren Maguire	Canberra		2906	Australia	2022-03-15
Elizabeth Morales	Austin	TX	78749	US	2022-03-15
Lexi Theros	Maui	HI	96793	US	2022-03-15
Elly Bazzo				Austria	2022-03-15
briana castillo	Hilo	HI	96720	US	2022-03-15
Kerstin Peschek	Wien			Austria	2022-03-15

Kayleen Castillo	Honolulu	HI	96817	US	2022-03-15
Lizzay Slaney	Bexleyheath		DA6	UK	2022-03-15
Mari Jovan Fernan	Honolulu	HI	96816	US	2022-03-15
Okazaki Lori	Honolulu	HI	96826	US	2022-03-15
Nora Eperjesi				Hungary	2022-03-15
Kiley Chun-Kawakami	Honolulu	HI	96825	US	2022-03-15
Teresa Heaton	Yeovil	ENG	BA21	UK	2022-03-15
Jennifer Quinn	Manchester	ENG	M11 1DE	UK	2022-03-15
Karen Scott Kaplan	Dungannon	NIR	BT70 3LH	UK	2022-03-15
Wolfbird Wildflower	Mt. Pleasant	SC	29464	US	2022-03-15
Miguel P	Tarragona		43003	Spain	2022-03-15
Glariela Vasquez	Richmond		23223	US	2022-03-15
Valeriia Evstratova	St Petersburg			Russia	2022-03-15
Lizzay S	London	ENG	N17	UK	2022-03-15
Aki Potić				Serbia	2022-03-15
Olivia Müsseler	Bonn		53113	Germany	2022-03-15
clinton scott	Northampton		NN1	UK	2022-03-15
Michelle Harrington	Shaftsbury	VT	5262	US	2022-03-15
Jeri Edson	St. George	UT	84770	US	2022-03-15
Akshanaa Naguleswaran	Tooting	ENG	SW17	UK	2022-03-15
HILARY BURDESS	Chippenham	ENG	SN14	UK	2022-03-15
Monica Swift-Hjerrild	Templeton	CA	93465	US	2022-03-15
Jenna Finley	Waco	TX	76710	US	2022-03-15
Rikki Garma	Edgewood	NM	87015	US	2022-03-15
Elena Mancini	Pesaro		61121	Italy	2022-03-15
Jerry Roja	Miami	FL	33165	US	2022-03-15
Marie Slaney	Bexleyheath		DA6	UK	2022-03-15
Zamora Carla	Thousand Oaks	CA	91362	US	2022-03-15
Kathleen Tatro	Walla Walla	WA	99362	US	2022-03-15
Julia Bjorklund	Lindstrom	MN	55045	US	2022-03-15
Bunny Kong	Kapaa	HI	96746	US	2022-03-15

Omar Tavera	Tyler	TX	75711	US	2022-03-15
mariah keller castillo	Hilo	HI	96720	US	2022-03-15
Anna Le	Cypress	TX	77433	US	2022-03-15
Hannah Yang	Pomona	CA	91768	US	2022-03-15
Anca Creanga	Greer	SC	29650	US	2022-03-15
Leah Tait	Seattle	WA	98155	US	2022-03-15
Troy Wong	Kapaa	HI	96746	US	2022-03-15
Elizabeth Miller	Helena	MT	59601	US	2022-03-15
Nicole Entenza	Alpine	CA	91901	US	2022-03-15
Larisa Londonenko	Novosibirsk			Russia	2022-03-15
Andrea Hosmer	Martinez	CA	94707	US	2022-03-15
Saman Amir	Islamabad			Pakistan	2022-03-15
Melody Lumby	Waldport	OR	97394	US	2022-03-15
Jocelyn Evans	Thomasville	NC	27360	US	2022-03-15
Lesly M	Long Beach	CA	90805	US	2022-03-15
Alaina Piazza	Ewa Beach	HI	96706	US	2022-03-15
Alec Raven				UK	2022-03-15
Ethan Campos	Bartlett		60103	US	2022-03-15
Anne Yang	Chino Hills	CA	91709	US	2022-03-15
Dotty Cheng	Chino	CA	91710	US	2022-03-15
Meagan lafrate	Granbury	TX	76049	US	2022-03-15
Tita Szlachetka	Vancouver		V3H	Canada	2022-03-15
Blyth Davis	Lihue	HI	96766	US	2022-03-15
Donte Trezevant	Charlotte		28262	US	2022-03-15
Titta Saromäki	Tampere		33200	Finland	2022-03-15
Tessa M	Asheboro	NC	27205	US	2022-03-15
Ingrid Jacobsen	Stavanger			Norway	2022-03-15
Jennifer Motz	Phoenix	AZ	85023	US	2022-03-15
Lisa Simpson	Preston		Pr4	UK	2022-03-15
Lacey Kuntzman	Mount Auburn		62547	US	2022-03-15
Christine Preston	Seattle	WA	98160	US	2022-03-15

Day Hill	Chesapeake	VA	23321	US	2022-03-15
Talia Gagnon	Lake Elsinore	CA	92530	US	2022-03-15
John Helak	River Vale	NJ	7675	US	2022-03-15
Kittey Duck	Ringwood		3134	Australia	2022-03-15
Jason Caster	West Linn	OR	97068	US	2022-03-15
Kazimir Eynsvort	Saint Augustine	FL	32095	US	2022-03-15
Alicia Mendoza	Orlando	FL	32811	US	2022-03-15
Liza Burrell	Hartland	MI	48430	US	2022-03-15
sophia kerr	Virginia Beach	VA	23456	US	2022-03-15
Kim Broad	Melbourne		3000	Australia	2022-03-15
atticus le	Virginia Beach	VA	23454	US	2022-03-15
princess mary Silerio	Virginia Beach	VA	23464	US	2022-03-15
Ian Gregory	Virginia Beach	VA	23462	US	2022-03-15
Russell Boatwright	Charlotte	NC	28214	US	2022-03-15
Kellie Cubangbang	Lihue	HI	96766	US	2022-03-15
Monica Pellettieri	Peterborough	NH	3458	US	2022-03-15
jaz ecalnea	Virginia Beach	VA	23455	US	2022-03-15
Sue Cheng	Placentia	CA	92870	US	2022-03-15
Lilly Berger	Denver	CO	80220	US	2022-03-15
kit wong	Berkeley	CA	94707	US	2022-03-15
Raynell Long	Silver Spring	MD	20910	US	2022-03-15
Rae-Marie May	Kapaa	HI	96746	US	2022-03-15
Jennifer Cassidy	Buckeye	AZ	85396	US	2022-03-16
Loredana Zaharia	Melbourne		3000	Australia	2022-03-16
Felicia Bonser	NORTH BEND	WA	98045	US	2022-03-16
Felicia Bonser	Everett	WA	98208	US	2022-03-16
Satah Fischer	Thousand oaks	CA	91360	US	2022-03-16
Aubrey Hawthorne	Houston	TX	77024	US	2022-03-16
Jamie West	Boise	ID	83713	US	2022-03-16
Kate Watson	Lehi	UT	84043	US	2022-03-16
Jakki Gough	Brisbane		4000	Australia	2022-03-16

Jane Evans	Albemarle		28001	US	2022-03-16
Anita Slipchinsky	Waikoloa	HI	96738	US	2022-03-16
Jackie Hanson	Belmont	NH	3220	US	2022-03-16
mikey basiqe	Winter Haven	FL	33880	US	2022-03-16
Cory Coulson	Virginia Beach	VA	23456	US	2022-03-16
Greg Odegaard	Kalama	WA	98625	US	2022-03-16
pat blake	Salmiya		98085	Kuwait	2022-03-16
Rachel Edwards	Ozark	MO	65721	US	2022-03-16
Ellen Greenfield	Knoxville	TN	37912	US	2022-03-16
Kenneth Jantzen	Austin	TX	78744	US	2022-03-16
Pedro Antunes			3810-175	Portugal	2022-03-16
Whitney Labrecque	Austin	TX	78704	US	2022-03-16
Nicholas Seffrood	Gladys	VA	24554	US	2022-03-16
Zoë Trout	Waco	TX	76710	US	2022-03-16
Meredith Gibboney	Carmichael	CA	95628	US	2022-03-16
Tara Tara	Ewa Beach	HI	96706	US	2022-03-16
Evan Krueger	Evansville	WI	53536	US	2022-03-16
Shelli Peters	Bend	OR	97702	US	2022-03-16
Joshua Gomez	Merced		95348	US	2022-03-16
Habit .	Spring Hill	TN	37174	US	2022-03-16
Aja Z	Pearl City	HI	96782	US	2022-03-16
Jessica Hamilton	Vancouver	WA	98686	US	2022-03-16
Immanuel Johnson	Dallas		75231	US	2022-03-16
Marie-Lauren Moureau				Belgium	2022-03-16
Taline Dinenberg	Lihue	HI	96766	US	2022-03-16
Erin French	Cincinnati	OH	45218	US	2022-03-16
Demis Danoudis	Melbourne		3204	Australia	2022-03-16
Myriam Ducoin	Trebes		11800	France	2022-03-16
Christian Gronewold	Ahrensburg		22926	Germany	2022-03-16
Alexis Mcrae	Powell River		V8A	Canada	2022-03-16
Sara Kraft	Alfter		53347	Germany	2022-03-16

Tamara Kempton	Hobart		7000	Australia	2022-03-16
Dana Moyer	Wichita	KS	67212	US	2022-03-16
Amanda Kilroy	Kapaa	HI	96746	US	2022-03-16
Amisha Payne	Poplar	ENG	E14	UK	2022-03-16
Megan Hamshere	London		E8	UK	2022-03-16
Chiara Fiorini	Bologna		40100	Italy	2022-03-16
Sarah Edwards	Ozark	MO	65721	US	2022-03-16
Brenda Choi	Las Vegas	NV	89121	US	2022-03-16
Maria Schmidbauer	Muehldorf		84453	Germany	2022-03-16
nanahan nanahan	ny		10012	US	2022-03-16
Addison Hutton	Springfield	MO	65807	US	2022-03-16
Cynthia Knaub	Dover	PA	17315	US	2022-03-16
Leila Vancleave	Las Vegas	NV	89104	US	2022-03-16
John Wilson	Cleveland	OH	44111	US	2022-03-16
Denie Quitoriano	Hilo	HI	96720	US	2022-03-16
Priscilla Lightfoot	Milton	FL	32570	US	2022-03-16
Elizabeth Na	Los Angeles	CA	90036	US	2022-03-16
Jerra Kate	Eastaboga	AL	36261	US	2022-03-16
Suzanne Stauss	Spokane	WA	99202	US	2022-03-16
Natalie Balderson	San Diego	CA	92123	US	2022-03-16
Patrick Weller	Seattle	WA	98122	US	2022-03-16
Christina O'Hara	Weaverville		28787	US	2022-03-16
Rob Fancher	East Greenwich	RI	2818	US	2022-03-16
Maggie Bukowski	Tucson	AZ	85705	US	2022-03-16
Teresa Ramsey	Artemas	PA	17211	US	2022-03-16
Joshua Curphey	Peterborough		PE7	US	2022-03-16
Neha Mehta	San Francisco	CA	94115	US	2022-03-16
Raluca Bugescu	Jackson	MI	49201	US	2022-03-16
Patti Ramos	Clawson	MI	48017	US	2022-03-16
Arien Reed	Kapaa	HI	96746	US	2022-03-16
Carrie Ogden	Kaneohe	HI	96744	US	2022-03-16

Donovan Claytor	Kalaheo	HI	96741	US	2022-03-16
Maranda McCool	Brandenburg	KY	40108	US	2022-03-16
Monique Bardo	Downey	CA	90242	US	2022-03-16
Robert Spampata	Honolulu	HI	96826	US	2022-03-16
Phuong Nguyen	Honolulu	HI	96817	US	2022-03-16
Johanna Trapp	Hanover		30559	Germany	2022-03-16
kristie shirley	Kent	WA	98032	US	2022-03-16
Steven Cohen	Kapaa	HI	96746	US	2022-03-16
liz ryan	Los Angeles	CA	90022	US	2022-03-16
Lissy Felsberger	Wien			Austria	2022-03-16
Mayu Langford	Kapaa	HI	96746	US	2022-03-16
Kimberly Winnett	Eugene	OR	97404	US	2022-03-16
Destinee Thornton	Eugene	OR	97404	US	2022-03-16
Miranda Kanemoto	Kapaa	HI	96746	US	2022-03-16
Thalia Castaneda	Van Nuys	CA	91406	US	2022-03-16
Kimberley Kerr		3000	Melbourne	Australia	2022-03-16
Lara Inglis	Whiting	NJ	8759	US	2022-03-16
Trevor Johnston	Bothell	WA	98012	US	2022-03-16
Shanie Ringer	Seattle	WA	98166	US	2022-03-16
Nidaa Shaikh	Detroit	MI	48235	US	2022-03-16
Cameron Pennywell	Panama City	FL	32404	US	2022-03-16
Mackenzie Diehl	Clinton Township		48038	US	2022-03-16
Jack Taylor	London	ENG	SE28	UK	2022-03-16
Summer Sheehan	Plumstead	ENG	SE18	UK	2022-03-16
Ola Skierka	Dagenham	ENG	RM10	UK	2022-03-16
Kenneth Diaz	Los Angeles		90022	US	2022-03-16
Lucy Anderson	Oxford	OH	45056	US	2022-03-16
Cheryl Phillips	Forest	VA	24551	US	2022-03-16
Mary Jarvis	Seattle	WA	98109	US	2022-03-16
Anna Laidler	East Stroudsburg		18301	US	2022-03-16
Candy Liu	Abilene	TX	79602	US	2022-03-16

marelyn ayala	Garland	TX	75040	US	2022-03-16
Ada Osyatinskaya	Tel Aviv			Israel	2022-03-16
Michael Cheung	Berkeley	CA	94703	US	2022-03-16
Michelle Puškárová	myjava		90701	Czech Rep	2022-03-16
Kimberly Winnett	Eugene	OR	97401	US	2022-03-17
Sarah H	Wexford	PA	15090	US	2022-03-17
Lyn Boswell	Williams	AZ	86046	US	2022-03-17
Kaye Duika	Hilton Head Island	SC	29928	US	2022-03-17
Kathy Saunders	Coldwater		L0K	Canada	2022-03-17
Melisia Holt	Fort Mitchell	KY	41017	US	2022-03-17
Orban Timea G.	Bv		505435	Romania	2022-03-17
Christopher Kowalski	Honolulu	HI	96817	US	2022-03-17
Christina Threbirdsint	Bay Shore	NY	11706	US	2022-03-17
Karlene Stauffacher	Phoenix	AZ	85017	US	2022-03-17
Olga Murray	Ft. Pierce	FL	34947	US	2022-03-17
Julia Souris	IMPERIAL	MO	63052	US	2022-03-17
Robert Tait	Schenectady	NY	12308	US	2022-03-17
Karyme Lara	Riverside	CA	92503	US	2022-03-17
Breanna Ross	Dallas	TX	75217	US	2022-03-17
Yury Najarro	Carson	CA	90746	US	2022-03-17
Jacquelyn Grant	Lihue	HI	96766	US	2022-03-17
Erica Di Claudio	Newark	NY	14513	US	2022-03-17
Hilda rubio	Panorama City	CA	91402	US	2022-03-17
Brittany Bernal	Kingsburg	CA	93618	US	2022-03-17
Maria Burgos	Panama City			Panama	2022-03-17
Angela Schulz	Kapaa	HI	96746	US	2022-03-17

Table 1

Name	City	State	Postal Code	Country	Commented Date	Comment
Gina Siska	Severna Park	MD	21146	US	2022-03-15	"Chickens are our heritage and provide food, eggs and fertilizer."
Hailey Wilson	Valley City	OH	44280	US	2022-03-15	"My pet chickens are just as sentient as wild chickens. It is unethical to harm these precious animals."
Elizabeth Morales	Austin	TX	78749	US	2022-03-15	"Feral chickens are an asset to the environment and killing wild birds at random and in huge numbers is unethical period"
Lizzay S	London	ENG	N17	UK	2022-03-15	"these beautiful, smart animals do not deserve to die."
Troy Wong	Kapaa	HI	96746	US	2022-03-15	"We all know who is complaining about the chickens. Tell the transplants complaining to hit the road"
Alec Raven				UK	2022-03-15	"Nature always finds a way"
Jennifer Motz	Phoenix	AZ	85023	US	2022-03-15	"These chickens are harmless and something people look forward to seeing when they travel to Hawaii. Let them live in peace and harmony."
Talia Gagnon	Lake Elsinore	CA	92530	US	2022-03-15	"I love chickens and all birds, they deserve kindness and to be respected"
Bunny Kong	Honolulu	HI	96822	US	2022-03-15	"We all know the ones complaining are those who have too much time on their hands and have nothing better to do in their daily lives. Chickens are great pest controllers and produce eggs, plus many more benefits! Kauai is ki
long r	Severn	MD	21144	US	2022-03-15	"Safety and Peace to Hawaii's Chickens"
Sara Kraft	Alfter		53347	Germany	2022-03-16	"Ich das wichtig finde zu unterstützen!"
Jerra Kate	Eastaboga	AL	36261	US	2022-03-16	"Hawaii needs their chickens!!!!!"
Arien Reed	Kapaa	HI	96746	US	2022-03-16	"As much as the roosters can be a nuisance, Kauai, and Hawaii, would not be the place it is without the chickens! They are a source of endearment and entertainment for both locals and visitors and give Kauai its unique charm
Carrie Ogden	Kailua	HI	96734	US	2022-03-16	"Hawaii's wild chickens are just as sentient as your pet dogs, cats, bunnies, or any other animal. I have rescue chickens that were born in parking lots, and cared for by a mama that would fiercely protect her babies with her life
Michael Cheung	Berkeley	CA	94703	US	2022-03-16	"Don't be scapegoating feral chickens as the problem to why birds are dying when your investments on all the 1% corporations producing harmful products are the true reason as to why the birds are dying."
Renee Denise	California	CA	92482	US	2022-03-17	"I love ALL chickens! Every chicken, feral or not, deserves to be respected and loved, regardless of the incorrect perceptions some people have of them. Chickens do NOT kill native animals. They are NOT predators. Chickens

<https://www.gopetition.com/petitions/save-hawaii-chickens.html>

We the undersigned do not support SB2195 or any bill that aims to "eradicate" feral chickens in Hawai'i through drugged bird seed or other methods.

1 **P Kawakami** Honolulu HI N/G 96825
2 Wil McC Hawaii USA
3 Mrs Rosella Tinn UK N/G
4 **E Camp** St. Louis Missouri USA
5 N/G Marla Gardner Kapaa HI
6 Mr Arikesh Rodriguez Abilene TX USA 79606
7 Mr. Mike Farahmand Vancouver British Columbia Canada
8 Liset Lira California USA
9 R Rush Kapa'a HI
10 **A Delesky** Jersey City NJ
11 **j swain** Kapaa HI
12 Dr. Hannah Silber EvansvilleWisconsin
13 Rebecca Clark Saint Louis MO
14 Sarah Darby North Chesterfield Virginia
15 **J Archer** Hawaii Koloa
16 Ms Shannon Dickerson Pittsburgh PA
17 Ms Sharon Starratt British Columbia, Canada
18 N/G Robert Zoellin Grass Valley CA
19 Mrs Madison Meyer Cordova TN
20 **B Meyer** USA
21 **A Cebreros** North Hollywood CA
22 **L Nik** Seattle WA
23 **B Harris** London UK
24 **S M** Kailua Kona Hawaii
25 **L Sherling** Birmingham Al USA
26 Miss Reka Gotz Urbanest Canal Reach London
27 Mr. Michael Kempinski KAPAA HI

Saige Ogden

How is it that humans feel they are the higher beings with the power to decide/ choose whether or not to eradicate another species on this planet. What are these chickens actually doing to cause disturbance to people? Absolutely nothing, that's what. They wonder about in the rain or shine searching for food in this concrete jungle to provide for their own kind... while us humans have the audacity to complain about chickens in a parking lot or on the side of the road as we so effortlessly drive from store to store and spend money without a care in the world. Every time I've seen a chicken roaming through a parking lot, they are doing nothing but minding their own business and going about their day of scavenging for food.... But who comes along and feels a need to disturb or try to grab them for no apparent reason? Oh that's right the Humans do.

Every point of this issue directs completely back to one general issue... humans. The chickens have done nothing, and will continue to do nothing to harm or affect anyone in any way, unless given a reason to. Just as we would do the same if the roles were reversed.

At the end of the day we are all the same. We are all creatures of this earth. It's just sad how flawed and unfortunate our own kind turned out, if we feel privileged enough to make a murderous decision such as this.

These creatures are innocent, and voiceless yet humans are deciding to do whatever feels "right" for their own Benefit.

If that's not disappointing, I don't know what is.

Renee Denise

I love ALL chickens! Every chicken, feral or not, deserves to be respected and loved, regardless of the incorrect perceptions some people have of them. Chickens do NOT kill native animals. They are NOT predators. Chickens are very gentle, docile, friendly, and intelligent birds. I know. I've had them as pets for 22 years. Let these chickens live the natural life that God created them to live!

Michael Cheung

Don't be scapegoating feral chickens as the problem to why birds are dying when your investments on all the 1% corporations producing harmful products are the true reason as to why the birds are dying.

Carrie Ogden

Hawaii's wild chickens are just as sentient as your pet dogs, cats, bunnies, or any other animal. I have rescue chickens that were born in parking lots, and cared for by a mama that would fiercely protect her babies with her life if needed. These "feral" chickens, like all sentient beings have families, friends, likes and dislikes. They all have very different personalities and are quite a joy to watch and get to

know.

The wild chickens, just like so many human families that live in Hawaii, are just trying to survive. #savehawaii'schickens

Arien Reed

As much as the roosters can be a nuisance, Kauai, and Hawaii, would not be the place it is without the chickens! They are a source of endearment and entertainment for both locals and visitors and give Kauai its unique charm. Though there may be rightful means to manage the population, distributing hormonal birdseed is the worst possible option I can conceive of.

1) This will harm many other native and endangered birds, as there's no way to control which birds eat the seed.

2) This will contaminate soil and water sources, effecting other animals and humans up the food chain. This should be a major concern!!

If in fact, it is "necessary" to control the feral chicken population, why not set up a more effective program in which the eggs can be harvested and used to feed local populations? Until we have a better solution than hormonal birdseed, I say, SAVE THE CHICKENS! [?]

Jerra Kate

Hawaii needs their chickens!!!!!!

Sara Kraft

Ich das wichtig finde zu unterstützen!!

Bunny Kong

We all know the ones complaining are those who have too much time on their hands and have nothing better to do in their daily lives. Chickens are great pest controllers and produce eggs, plus many more benefits! Kauai is known for their chickens; literally a tourism gimmick on souvenirs. Getting rid of them is absolutely absurd. Do the higher ups have no other more pressing concerns to attend to??

Talia Gagnon

I love chickens and all birds, they deserve kindness and to be respected

Jennifer Motz

These chickens are harmless and something people look forward to seeing when they travel to Hawaii. Let them live in peace and harmony.

Alec Raven

Nature always finds a way

Troy Wong

We all know who is complaining about the chickens. Tell the transplants complaining to hit the road

Lizzay S

these beautiful, smart animals do not deserve to die.

Elizabeth Morales

Feral chickens are an asset to the environment and killing wild birds at random and in huge numbers is unethical period

Hailey Wilson

My pet chickens are just as sentient as wild chickens. It is unethical to harm these precious animals.

Gina Siska

Chickens are our heritage and provide food, eggs and fertilizer.

DEPARTMENT OF AGRICULTURE

TESTIMONY OF SCOTT E. ENRIGHT CHAIRPERSON, BOARD OF AGRICULTURE
BEFORE THE HOUSE COMMITTEE ON AGRICULTURE THURSDAY, MARCH 20,
2014

HOUSE CONCURRENT RESOLUTION 54 REQUESTING THE DEPARTMENT OF
AGRICULTURE TO EXTEND THE USE OF OVOCONTROL TO FERAL CHICKENS

Chairperson Wooley and Members of the Committee:

...Ovocontrol is oral contraceptive bait that is a general use pesticide approved for controlling large pigeon populations. The resolution asks that the HDOA accomplish this request by filing a special local needs registration with the United States Environmental Protection Agency (EPA). The HDOA has concerns with this resolution, as it believes other methods to control feral chicken populations should be considered before use of OvoControl, in view of the potential impact on non-target species and a lack of data on possible human health consequences of such a choice.

...

There is no data on the safety of human consumption on treated feral chickens or eggs with OvoControl in their system.

...

Whether the OvoControl manufacturer applied to EPA to register OvoControl for use on feral chickens or whether HDOA applied to do so through a special local needs registration, studies would need to be conducted to determine whether or not it is safe to consume OvoControl treated feral chickens or eggs.

...

As a part of a special local needs registration, HDOA would need to gather data on feral chickens and OvoControl, including proper dosage of OvoControl for feral chickens, efficacy of OvoControl on feral chickens, optimal size of pellets to feed feral chickens, and optimal type of pellet feeders to induce feral chicken feeding and avoid non-target species feeding, to the extent possible.

Such data collection would be manpower intensive, would be estimated to take over a year to conduct, and given the strains on its limited staffing, HDOA would need

to request an appropriation for the data collection.

HDOA would also need to file a Section 7 request with the U.S. Fish and Wildlife Service to determine whether use in the sites listed on the label would result in any unreasonable effects on threatened or endangered species.

...

For example, an area where feral chickens are frequently a problem, especially on Kauai, is golf courses. Nene also inhabit golf courses on Kauai, so there seems to be a risk of exposure to an endangered species if OvoControl is used on or near golf courses and other areas where Nene are found.

HDOA notes that, ordinarily, it is the pesticide manufacturer/registrant who applies to EPA to register a new use for an already approved pesticide product and who develops the necessary data to support the new use, as the manufacturer/registrant stands to profit if increased sales result from the new use. As discussed above, as a part of a special local need registration, an applicant, which could be the State or an individual farmer, must test a registered pesticide on a crop or pest not listed on the pesticide label in order to develop data to support EPA registration for the new use. This procedure has been particularly useful when trying to control newly introduced and damaging agricultural or environmental pests or trying to find a pesticide appropriate for minor crops of local importance to Hawaii. In view of this background, having the State initiate a special local need registration does not seem to be an appropriate way to extend OvoControl use to feral chickens in Hawaii.

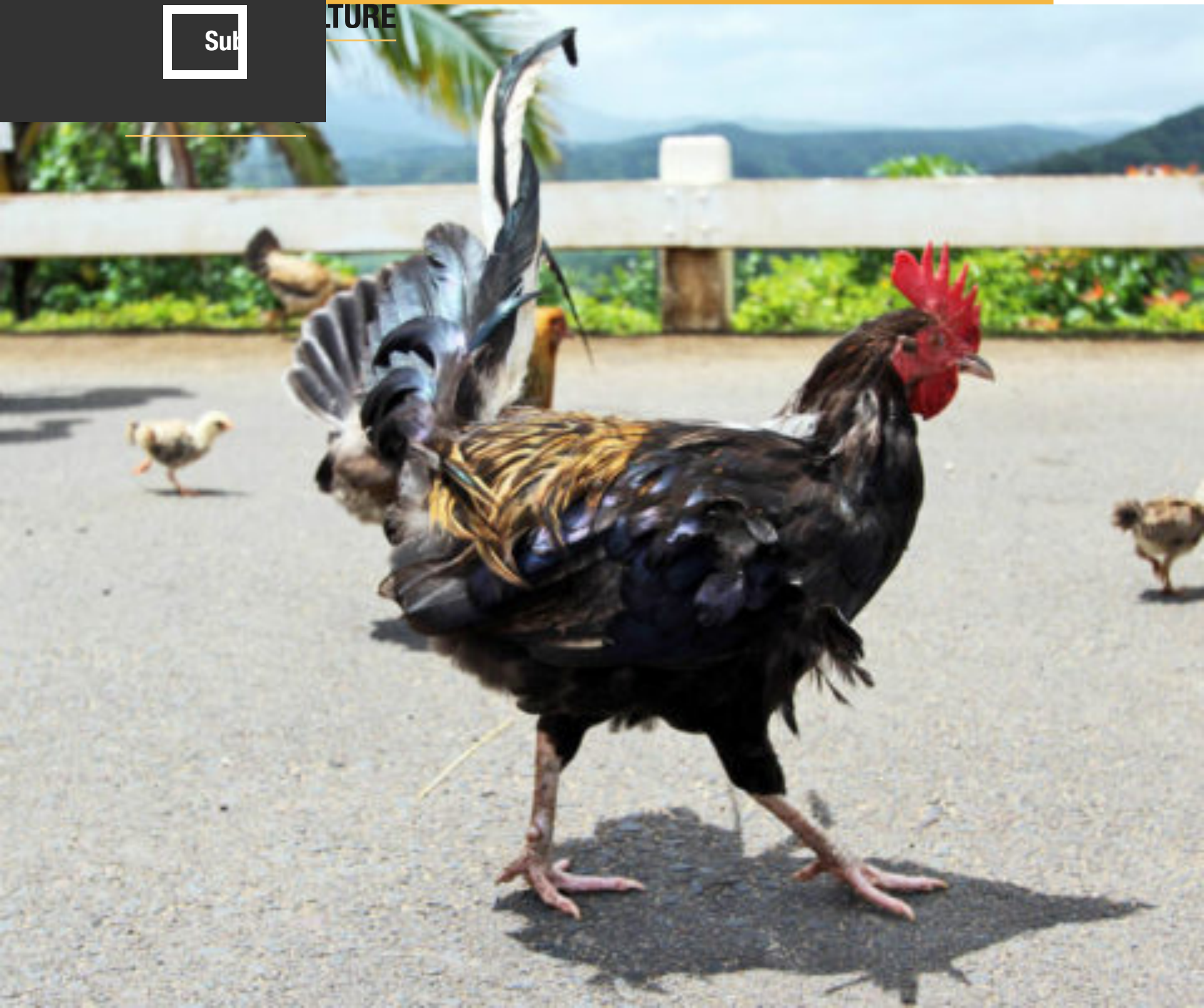
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FERAL CHICKENS IN HAWAII HOLD

'JUNGLEFOWL' GENES

MARCH 26TH, 2015

POSTED BY [MARK KUYKENDALL-MSU](#)

"It is crucial that we identify and conserve the genetic variation that still remains in the Red Junglefowl. This variation could soon be essential for the improvement or evolutionary rescue of commercial chicken breeds," says Eben Gering. (Credit: [Steven Benes/Flickr](#))

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UNIVERSITY [MICHIGAN STATE UNIVERSITY](#)

The Hawaiian island of Kauai has a feral chicken problem. How did they get there?

Eben Gering of Michigan State University is working with other researchers to study the feral chickens' mysterious ancestry.

Their results, published in [Molecular Ecology](#), may aid efforts to curtail the damage of invasive species in the future, and help improve the biosecurity of domestic chicken breeds.

Domesticated chickens, humanity's leading source of animal protein, are fighting rapidly

evolving pathogens and fertility issues likely caused by inbreeding.

The Red Junglefowl, the chicken's closest living relative, is believed to have been introduced to Hawaii by ancient Polynesians, and is threatened by habitat loss and the contamination of gene pools from hybridization in its native Asian range.

In Kauai, a feral hybrid of the Red Junglefowl and the domesticated chicken has presented the researchers with an opportunity to study the potential practical application of invasive genetics.

"It is crucial that we identify and conserve the genetic variation that still remains in the Red Junglefowl. This variation could soon be essential for the improvement or evolutionary rescue of commercial chicken breeds," says Gering, a postdoctoral research associate in the zoology department.

Through investigating the murky genetic origins of the chickens, the team sought to gain insights into the ongoing evolution of the population.

"We are eager to learn which combinations of genes and traits are emerging from this 'evolutionary experiment,' and to see whether our findings can translate to gains in the sustainability or efficacy of egg and poultry production," Gering says.

Gering and his team found that some chickens were a perfect match for genetic data from ancient Kauai cave bones that predate Captain Cook's 1778 discovery of Hawaii. Others, however, had genotypes that are found in chicken breeds developed recently in Europe and farmed worldwide.

The team also found evidence for a population increase in the chickens in Kauai that coincided with storms that locals believe released chickens and caused them to go feral over the last few decades.

Taken together, the data suggest that the population may have hybrid origins, resulting from interbreeding between the ancient Red Junglefowl and their domestic counterparts.

Additional clues showed up in the appearance and behavior of the chickens, which display

physical traits and coloration ranging from those of ancient jungle birds to more recent domesticated breeds.

[related]

The roosters' crowing ranged from typical of the Red Junglefowl to the familiar sound heard on a domestic farm.

But why do these variations matter?

Studying the evolutionary forces at play among the feral chicken population may lead to the ability to create hardier breeds of domestic chickens.

"Darwin drew heavily from his studies of domesticated species to develop his theory of evolution," Gering says.

"This can provide important insights into evolution in action within human altered landscapes, and may even someday help build a better chicken. And that would be something to crow about."

Source: [*Michigan State University*](#)

[Original Study](#) DOI: 10.1111/mec.13096



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Are Veterinary Medicines Causing Environmental Risks?

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The Danish University of Pharmaceutical Sciences

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Are **VETERINARY** **MEDICINES** *Causing* **Environmental Risks?**

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U.S. GEOLOGICAL SURVEY

BENT HALLING-SØRENSEN
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JOHANNES TOLLS
HENKEL KGAA
(GERMANY)

Too little is known about the effects of these compounds, their metabolites, and degradation products.

Recently, low levels of veterinary medicines have been detected worldwide in soils, surface waters, and groundwaters (1, 2). Although the impacts of selected compounds—most notably anthelmintics and selected antibacterial compounds—have been extensively investigated (3, 4), many other substances found in the environment are less publicly well understood. As a result, researchers have raised questions about the impact of veterinary medicines on organisms in the environment and on human health. Several key questions will be addressed in this article. What other veterinary medicines might be in the environment, and should we be concerned about these? How do these substances behave in the environment, and do they differ from other chemical classes (e.g., pesticides)? What are the effects of long-term, low-level exposure to these medicines? Do their degradation products present environmental risks? What subtle human and environmental effects may be elicited by these drugs? Do medicines in the environment play a role in antibacterial resistance? How do these substances interact in the environment with other veterinary medicines and other contaminants?

Environmental assessments of veterinary medicines have been required by the U.S. Food and Drug Administration (FDA) since 1980 and in the European Union since 1997. During these assessments, data are generated on the effects of the veterinary medicine on fish, daphnids, algae, microbes, earthworms, plants, and dung invertebrates (5, 6). As the results of the studies performed during these assessments are becoming increasingly accessible—for example, many of the environmental assessments are now posted on the U.S. FDA's website (7)—and as numerous publications in this general area emerge, a wealth of information has become accessible on the environmental fate and effects of veterinary medicines.

In this article, we use the newly available data to begin to address the major questions and concerns about veterinary medicines in the environment. We also identify major gaps in the current knowledge and future research needs, hoping that this feature will encourage readers to become involved in this topical and expanding area. We will not address how human pharmaceuticals impact the environment; several recent reviews provide detailed information on human medicines (8, 9).

What substances are likely to enter the environment and how?

Veterinary medicines are widely used to treat disease and protect the health of animals. Some drugs are considered feed additives, often improving and thereby allowing animals to be brought to market faster and at lower cost. Livestock farmers supplement their animal feed with a wide range of compounds from a number of therapeutic classes, including antimicrobials, antiprotozoals, ecto- and endo-parasiticides, and hormones (see Table 1). Many of the substances,

such as cypermethrin, diazinon, and oxytetracycline, are used as pesticides or human medicines.

Obtaining information on the usage of individual veterinary medicines is difficult, which makes the design of monitoring and experimental studies problematic. However, limited data on the sale and usage of the different chemical classes in countries such as the United Kingdom, Denmark, Germany, and The Netherlands are available in the public domain (4, 10–12). Detailed data from the United Kingdom, The Netherlands, and Denmark indicate that antimicro-

TABLE 1

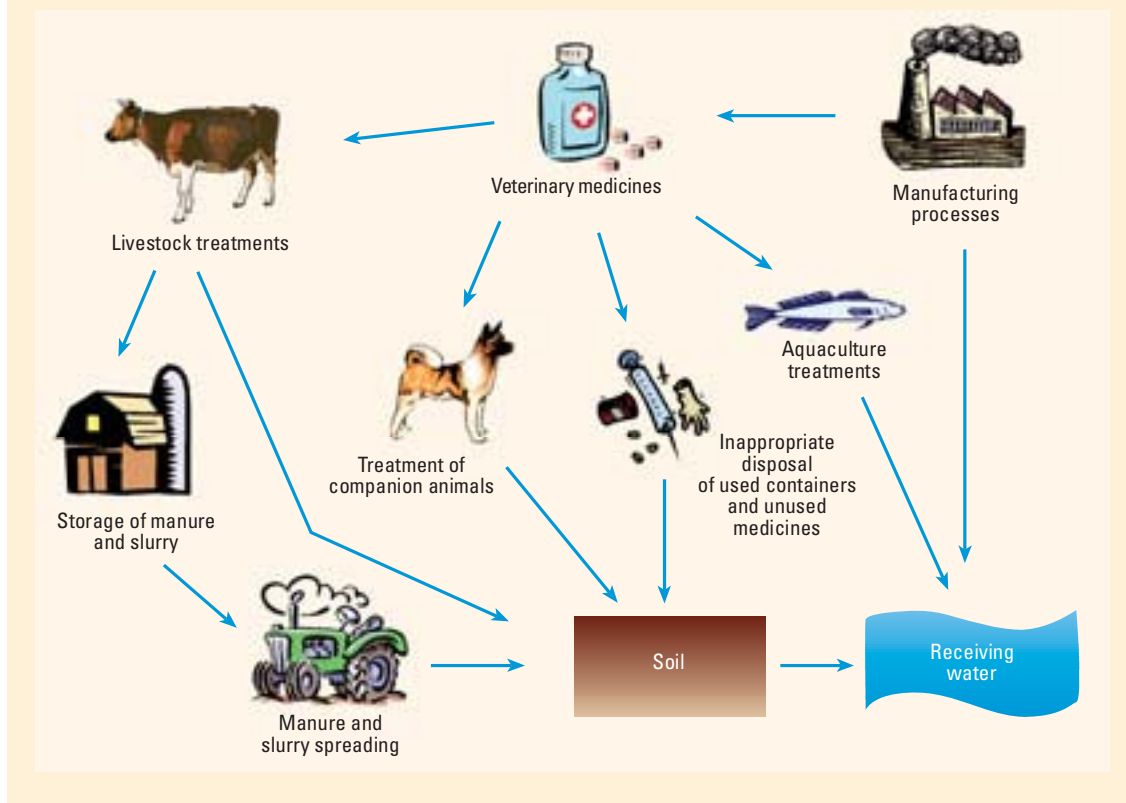
Major usage veterinary medicines based on data obtained for the United Kingdom and The Netherlands

Groups	What are they?	Treatment details	Examples
Antimicrobials	Substances that kill microorganisms or suppress their multiplication or growth	Treatment and prevention of bacterial diseases	amoxicillin, dihydrostreptomycin, enrofloxacin, lincomycin, oxytetracycline, sulfadiazine, tylosin
Endectocides	Antiparasitic agents used to control internal and external parasites	Control of gastrointestinal worms, liver flukes, and lung worms	ivermectin, pyrantel, triclabendazole
Coccidiostats and antiprotozoals	Chemical agents effective against the control of infections of the intestinal tract caused by single-cell parasites; used in all areas of farming, especially poultry	Prevention of coccidiosis and swine dysentery	amprolium, clopidol, dimetridazole, narasin, nicarbazine
Antifungals	Agents that kill or control fungi	Treatment of fungal and yeast infections	chlorhexidine, griseofulvin, miconazole
Aquaculture treatments	Used in the propagation and rearing of aquatic species in controlled or selected environments	Treatment of sea lice infestations and fununculosis	amoxicillin, azamethiphos, cypermethrin, emamectin, florfenicol, hydrogen peroxide, oxolinic acid, oxytetracycline
Hormones	Active regulatory chemicals that signal the coordination of cellular functions	Induction of ovulatory oestrus, suppression of oestrus, systemic progesterone therapy	altrenogest, estradiol benzoate, ethinyl estradiol, methyltestosterone, melatonin, progesterone
Growth promoters	Used to promote the growth of food-producing animals	Increase food digestion	flavophospholipol, monensin, salinomycin
Anaesthetics	Used to anaesthetize animals		halothane, isoflurane, lidocaine/lignocaine, procaine
Euthanasia products	Used to kill sick animals		pentobarbitone sodium
Tranquilizers	Used to sedate animals		phenobarbitone
NSAIDS	Nonsteroidal anti-inflammatory agents that work by inhibiting the production of prostaglandins		phenyl butazone
Enteric bloat preparations	Used to treat bloat, mainly in cattle		dimethicones, ploxalene

FIGURE 1

Pathways into the environment for veterinary medicines

Veterinary medicines can take several routes to enter water and soil.



bial substances are sold in the highest amounts followed by coccidiostats, sheep dip chemicals, growth promoters, endoparasitic wormers, antifungals, anti-inflammatory preparations, and enteric preparations (Table 1). Several other groups of chemicals may also be potentially important because of their heavy usage, including antiseptics, steroids and other hormones, diuretics, cardiovascular and respiratory treatments, and immunological products.

In the United States, sales of animal health products totaled \$3.3 billion in 1996. Of these, dosage-form medicines and other pharmaceutical preparations used in disease prevention and treatment programs for both pets and farm animals made up \$2.3 billion; feed additives to control or prevent disease, enhance growth, or improve feed efficiency accounted for \$540 million; and biologicals (vaccines, bacterins, and antitoxins used to immunize livestock and pets) grossed \$466 million (13). Estimates of antibacterial use in U.S. aquaculture alone ranges from 92,500 to 196,400 kg annually (14). Values for the total general use of these medicines is more uncertain. One study estimates that 8.5 million kg of antibacterials are used annually in the United States for agricultural purposes (15), whereas another estimates that nontherapeutic uses of antibacterials for livestock production alone account for 11.2 million kg annually (16).

Figure 1 shows that veterinary medicines can enter the environment via different pathways, including emissions during the manufacture, formu-

lation, and treatment processes, and as a result of the disposal of unused medicines and their containers. How the drug is emitted during the treatment process will depend on whether the animal received the treatment topically, in feed, or as an injection or bolus, and on the methods of animal husbandry. The most important routes of entry into the environment are likely the direct discharge of aquaculture products, the excretion of substances in urine and feces of livestock animals, and the washoff of topical treatments from livestock animals. Contributions from the manufacturing process are likely low in the United States and European Union, where manufacture and formulation are subject to tight regulatory controls.

Although recent studies suggest that veterinary medicines may enter the environment as aerosols and dusts, the significance of these releases into the atmosphere is unknown (17). Similarly, the impacts of emissions from treating pets and disposing of unused or expired products and waste containers cannot be established. However, researchers consider emissions via these routes less relevant than emissions to soils and surface waters from aquaculture and intensive livestock treatments (18).

Moreover, substances absorbed by an animal can be metabolized. The degree of metabolism will depend on the type of substance, the species treated, and the age and condition of the treated animal. This type of information can be obtained from the phar-

macokinetics literature for veterinary medicines. If the compound is not metabolized, it will be excreted unchanged. Because of the hydrolysis of certain compounds such as sulfonamides (19) or the photolysis of the parent compound, such as what occurs with tetracyclines (20), abiotic degradation products can end up in the urine. Consequently, urine and feces from a treated animal may contain a mixture of the parent compound and transformation products (18).

Veterinary medicines that have a high potential of entering the environment

Stars indicate compounds that have been monitored and detected (18).

amitraz	enrofloxacin	oxolinic acid*
amoxicillin	fenbendazole	oxytetracycline*
amprolium	flavomycin	phosmet
antiseptics	flavophospholipol	piperonyl butoxide
baquiloprim	florfenicol	poloxalene
cephalexin	flumethrin	procaine benzylpenicillin
chlortetracycline*	immunological products	procaine penicillin
clavulanic acid	ivermectin*	robenidine hydrochloride
clindamycin	lasalocid sodium	salinomycin sodium
clopidol	levamisole	sarafloxacin*
cypermethrin*	lido/ligocaine HCL	sulphadiazine
cyromazine	lincomycin*	tetracycline*
decoquinatate	maduramicin	tiamulin
deltamethrin	monensin	tilmicosin
diazinon*	morantel	toltrazuril
diclazuril	neomycin	triclabendazole
dihydrostreptomycin	nicarbazin	trimethoprim*
dimethicone	nitroxylin	tylosin*
emamectin benzoate*		

Source: Data from Ref. 10.

In a recent prioritization exercise, information on amounts, pathways to the environment, and metabolism of veterinary medicines used in the United Kingdom helped identify veterinary medicines that are likely to occur in the environment (10). On the basis of this information, 56 substances or groups of substances that may be released to the environment in significant amounts were identified (see the box above). Studies show that the monitored compounds on the list do indeed occur in surface waters or soils (2, 3, 21). However, no one has yet looked for many of the other substances (18).

How do they behave?

Once released into the environment, veterinary medicines and their corresponding degradation products will be transported and distributed to air, water, soil, or sediment on the basis of factors and processes including physicochemical properties of the substance; extent of degradation in manure, slurry, soil, or water; propensity to partition to soil and sediment; and the characteristics of the receiving environment.

For animals at pasture or in aquaculture, the medicines may be excreted directly to soil or water, respectively. However, on livestock farms that house many animals, large quantities of manure or slurry are produced. Typically, this manure is stored for varying

lengths of time before it is applied to land as fertilizer. During this storage period, veterinary medicines and their degradation products could potentially degrade further. Veterinary medicines can persist in manure for days (e.g., tylosin in pig slurry, penicillin in poultry manure, nicarbazin in poultry manure) to months (e.g., ivermectin, chlortetracycline, amprolium) (22–24). Degradation rates can also vary across manure types; for example, sulfachloropyridazine has been shown to rapidly degrade in broiler feces but persist in laying hen feces (25). In addition, metabolites may revert to the active parent compound in the manure (26).

Once a compound is released to the environment, key chemical properties—such as water solubility, pH of the matrix, volatility, and sorption potential—will influence its behavior. Sorption coefficients (K_d) for veterinary medicines to soils and sediments range from 0.2 (chloramphenicol in marine sediment) to 5610 (enrofloxacin in soil) L/kg. K_d values vary considerably for a given compound in different soils (25). Unlike many pesticides and industrial chemicals, these variations cannot be explained by differences in soil organic carbon content (26). Moreover, unlike many other groups of organic compounds, prediction of organic-carbon normalized sorption coefficients (K_{oc} s) from the octanol-water partition coefficient (K_{ow}) leads to significant underestimation of K_{oc} values (27). Mechanisms other than hydrophobic partitioning, such as cation exchange, cation bridging at clay surfaces, surface complexation, and hydrogen bonding, may play a role in the sorption of veterinary medicines to soils and sediments (28). Therefore, the observed sorption of selected veterinary medicines may depend heavily on pH and ionic strength (29).

Veterinary medicines may degrade biotically or abiotically in soils and water. Generally, these processes will reduce the potency of the veterinary medicines; however, some degradation products have similar toxicity to their parent compound (30). Degradation rates vary significantly across chemicals. In soils, for example, diazinon, emamectin, olaquinox, and tylosin rapidly degrade (31–33); ivermectin, ceftiofur, and metronidazole are moderately persistent (31, 34); and sarafloxacin is highly persistent (35). Degradation may be affected by environmental conditions, such as temperature, soil type, and pH. For example, the degradation half-life for ivermectin under winter conditions is more than 6 times greater than during summer conditions, and the compound degraded faster in a sandy soil than in a sandy loam soil (34, 36). The presence of manure or slurry in soils may increase the degradation rates of veterinary medicines, although recent studies have shown that this may not be the case (31).

Recent studies have also assessed the major routes of transport for veterinary medicines in the environment (37). Nonsorptive medicines, such as sulfonamides, appear to be quickly transported to surface waters, whereas the transport of highly sorptive substances appears to be much slower, with concentrations measured in drainage outfalls many months after application.

What are their effects?

Data are available on the toxicity of many veterinary medicines to a range of organisms. That is because during the risk assessment process, data are typically needed on the toxicity of these substances to fish, daphnids, algae, microbes, earthworms, plants, and sometimes dung invertebrates.

Data on acute aquatic toxicity of commonly used veterinary medicines are publicly available for daphnids but are more limited for fish and algae (18). Daphnids and fish appear to be sensitive to the macrocyclic lactones (48-hour 50% immobilization concentrations [48 h EC₅₀] values range from 0.000025 for ivermectin to 0.00045 mg/L for eprinomectin); organophosphorus compounds (48 h EC₅₀ for diazinon range from 0.0009 to 0.0018 mg/L); and synthetic pyrethroids (48 h EC₅₀ for cypermethrin is 0.00015 mg/L) (33, 36). In contrast, blue-green algae (cyanobacteria) appear to be sensitive to many of the antimicrobial groups. For example, reported EC₅₀ values for cyanobacteria with amoxicillin, benzyl penicillin, sarafloxacin, spiramycin, tetracycline, and tiamulin are all less than 100 µg/L (37).

Limited information is available on the effects of veterinary medicines on soil-dwelling organisms. Earthworms appear to be sensitive to parasiticides, whereas plants appear to be sensitive to many of the antimicrobial groups and the macrocyclic lactones. Not surprisingly, the antimicrobial compounds are most toxic to soil microbes.

Data on the effects of substances on dung invertebrates may also be required. Ecotoxicity studies for dung-dwelling organisms have generally been performed on anthelmintic compounds (macrocyclic lactones, milbemycins, and benzimidazoles) and pyrethroids. Macrocyclic lactones (ivermectin, doramectin, and eprinomectin) have been shown to affect the mortality of dung invertebrate larvae at very low dung concentrations with 50% lethal concentration (LC₅₀) values less than 0.036 mg/kg (38). Studies on manure excreted from animals treated with the macrocyclic lactones demonstrate that the dung can be highly toxic to dung invertebrates for prolonged periods. In contrast to the macrocyclic lactones, the pyrethroids are most toxic to the adult invertebrates and demonstrate high mortality for a period of months following topical treatment (39). The benzimidazoles appear much less toxic, with no mortality of dung invertebrates observed in manure (40); however, chemical structure indicates that these drugs may affect dung fungi.

A comparison of available ecotoxicity data on standard organisms for commonly used medicines with available monitoring data from water, soil, and dung samples indicates that, in general, environmental concentrations are more than an order of magnitude lower, as shown in Figure 2. Thus, for many veterinary medicines, acute environmental effects are unlikely, and the regulatory framework is working. Exceptions include ivermectin and doramectin in dung and monensin in soil, for which concentrations have been found in the environment that are higher than effects concentrations for selected species. Therefore, it appears that under cer-

tain circumstances, veterinary medicines could affect terrestrial and aquatic systems.

What are the impacts of degradation products?

With the exception of a few studies, the potential environmental impacts of metabolites have not been extensively studied. Generally, metabolites are less potent than the parent compounds. Yet, these less potent compounds may still have significant activity. Studies performed by pharmaceutical company Pfizer demonstrated that two of the major metabolites of doramectin, 3'-*o*-desmethyldoramectin and 8- α -hydroxydoramectin, were less toxic to daphnids than the parent compound (38). However, the ecotoxicity data indicated that both metabolites were still highly toxic to daphnids, with 48 h EC₅₀ values of <0.0011 mg/L. Recent studies on tetracyclines have shown that selected degradation products have similar potencies on bacteria as their parent compounds (30). For example, anhydrotetracycline (ATC), a metabolite of tetracycline that has one less hydroxyl group than the parent, had an EC₅₀ value for sludge bacteria approximately 3 times lower than the EC₅₀ value for the parent compound. Similar findings were reported for the photodegradation products of enrofloxacin (41).

Consequently, any risk assessment based on the parent compound may underestimate real effects in the environment. Moreover, because the metabolite's behavior could differ from the parent compound, selected environmental compartments may be more susceptible to adverse exposure from metabolites than what would be predicted if only the parent is considered. For example, ATC has a lower sorption coefficient than tetracycline and is therefore likely to be transported more readily to surface water and groundwater. Similar conclusions may be drawn for the tylosin (tylosin A) degradation products: tylosin B, C, and D. *K_{ow}*s for tylosin B, C, and D are all lower than tylosin A and therefore are expected to be more mobile than tylosin A.

What are the subtle effects?

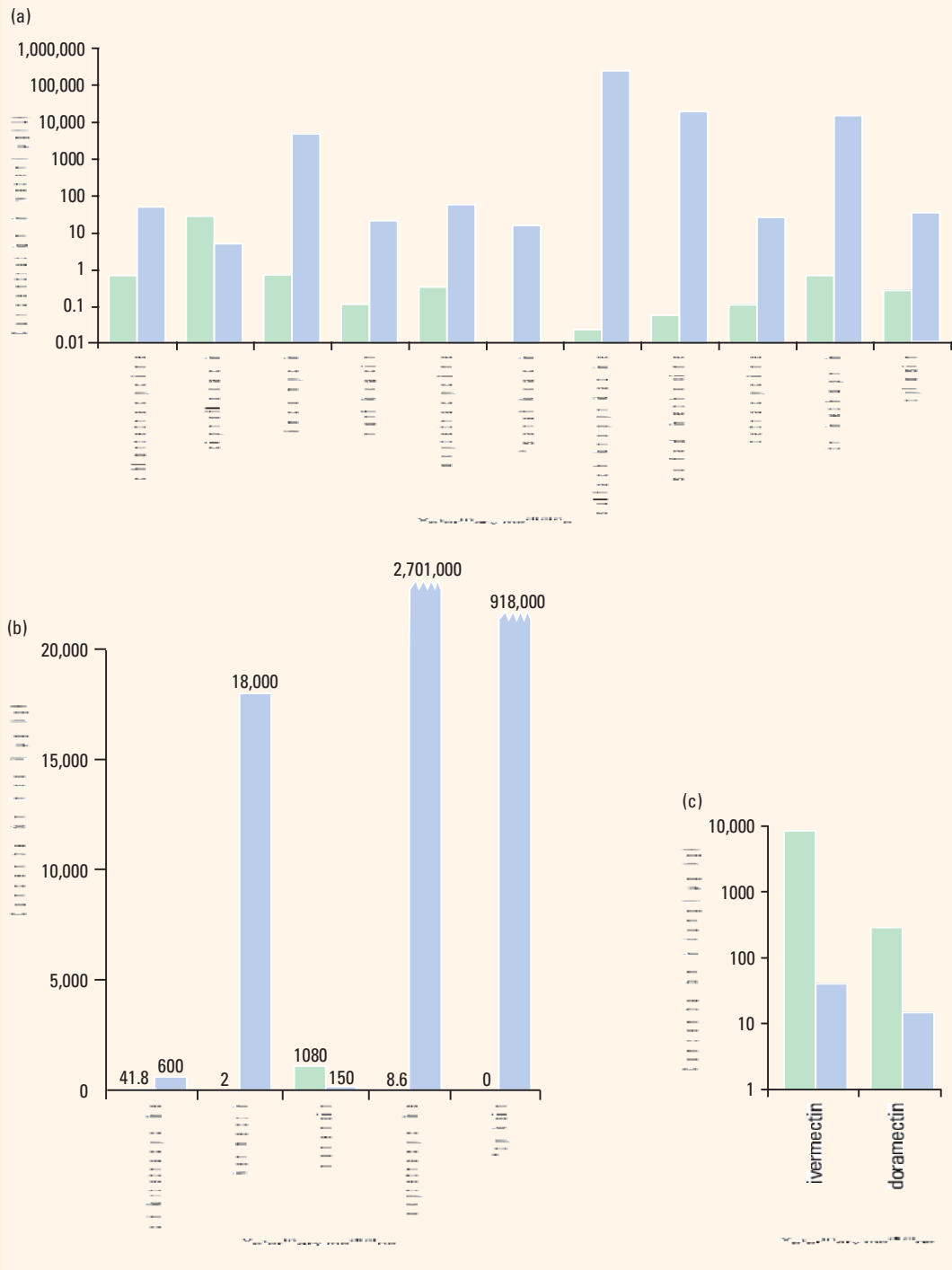
Despite concentration and effects data that indicate that acute environmental impacts are unlikely for many of the major substances under the current regulatory schemes, some researchers have raised concerns over impacts on other species and the potential longer-term and subtle effects of these medicines. However, little is currently known about the potential chronic effects from long-term, low-level exposures to veterinary medicines. Studies that have looked at these effects have tended to focus on the parasiticides and the antimicrobials.

Several studies investigated the effects of antimicrobial substances on microbes in soils and sediment (42). Selected substances have been shown to inhibit soil bacteria growth, as well as reduce the hyphal length in active molds. Effects on the microbial composition of soils have also been demonstrated (42). With the exception of a few studies (43), effects on soil and sediment functioning have not been considered. Those studies demonstrate that veterinary antibacterials may affect sulfate reduction in soil and inhibit the decomposition of dung organic matter in soil (43). The antibacterials work focused on effects on microbes

FIGURE 2

Concentrations of select veterinary medicines in water, soil, and dung samples

Green bars give the concentrations measured in the environment, and blue bars show the effective concentration (EC_{50}) or maximum inhibitory concentration of each medicine with standard test organisms in (a) water, (b) soil, and (c) dung samples. Starred compounds were not detected, and EC_{50} for oxytetracycline and tylosin are off scale. The comparison indicates that veterinary medicines may not pose much of a risk to the environment, except in dung.



and microbial processes, but recent studies indicate that selected antibacterials also limit the growth of aquatic macrophytes at very low concentrations (43).

Once in the dung, veterinary medicines may per-

sist, potentially affecting organisms directly exposed to these compounds. Such exposures may lead to sublethal toxic effects. For example, in addition to the acute effects described above, the macrocyclic lac-

tones have been shown to elicit a number of sublethal responses in dung-inhabiting invertebrates, including reduced feeding, disruption of water balance, reduction in growth rate, interference with moulting, inhibition of pupation, prevention of emergence of adults, and the disruption of mating (45, 46). Livestock dung usually contains a diverse invertebrate fauna and provides a fruitful foraging habitat for other organisms; therefore, using macrocyclic lactones may indirectly affect certain species by depleting the quality and quantity of an important food resource (47). Large data gaps in our current knowledge of the subtle and longer-term effects of veterinary medicines may be filled by using information on a substance's mode of action to identify species potentially sensitive to the medicine and understand the types of effects that might be elicited.

Do medicines cause resistance in the environment?

Antimicrobial resistance is a growing public health concern and has been a subject of debate for decades. Antibacterials given to livestock at subtherapeutic doses prevent infectious diseases, increase feed efficiency, and increase the rate of weight gain (48). Numerous studies suggest a link between antibacterial use in agriculture and antibacterial-resistant infections (49), and there is evidence that antibacterial resistance from agriculture can be transferred to humans (50).

These observations may be due in part to exposure via the environment. For example, numbers of antibacterial-resistant microflora in samples taken from the outlet of fish farms have increased (51), and the presence of antibacterial-resistant bacteria in soils treated with pig manure has been documented (52). Sengeløv and co-workers showed that resistance to tetracycline, macrolides, and streptomycin measured for a period of eight months in soil bacteria from farmland treated with pig manure slurry was elevated after spreading the slurry but declined throughout the sampling period to a level corresponding to the control soil. Higher loads of pig manure slurry yielded higher occurrences of tetracycline resistance after spreading. Several authors have studied the transfer of genes between bacteria in sediment, soil, water, and wastewater (53–55). Finally, studies document transport of tetracycline-resistant genes in groundwater under swine production facilities (56).

How do substances interact?

Several veterinary medicines may be used to treat a herd, and it is likely that other chemicals (such as pesticides) will be applied in the same area. Terrestrial and aquatic organisms may therefore be exposed to mixtures of medicines and other chemicals. For example, during a nationwide reconnaissance for pharmaceuticals in U.S. streams (2), lincomycin (an antibacterial used for agricultural purposes) was detected in combination with as many as 27 additional chemicals, including chlorpyrifos, coprostanol, diazinon, dieldrin, trimethoprim, and tylosin (57).

Interactive effects—including additivity, antagonism, and synergism—could increase or decrease the potential effects in the environment. For example, an-

tibacterials might be expected to interact with other antibacterial substances, leading to a larger effect on the environment than would be predicted if each compound was considered individually. In addition, veterinary medicines may affect key fate processes of other chemical groups. For example, antibacterials are toxic to soil microbes and hence could reduce a soil system's capability to degrade other contaminants, such as pesticides. To date, no data have been generated on the impact of veterinary medicine mixtures on the environment. Preliminary studies are, however, starting to examine the interactions of human pharmaceutical mixtures on pond communities (58).

Which is the way forward?

In the previous sections, we have used the information currently available on veterinary medicines to begin identifying the risks that they may pose to the environment. Comparing the results of standard laboratory studies with newly available environmental monitoring data indicate that, for most veterinary medicines, effects concentrations are significantly higher than environmental concentrations, suggesting that veterinary medicines may not acutely impact most aquatic and terrestrial organisms. However, there are instances in which measured concentrations are higher than available effects data. In addition, with many unknowns, the relationship between these standard tests and more subtle longer-term effects have not been established yet.

Therefore, research should focus on a number of key issues, namely, collating better information on the quantity and use of veterinary medicines in different countries, developing sensitive analytical methods to measure parent drugs and their degradation products, and understanding better the potential for releases to the environment for different treatment types—including an assessment of aerial emissions and inputs from pasture treatment and other “novel” routes such as farm runoff. In addition, targeted ecotoxicological studies are needed to investigate the potential subtle and long-term effects of veterinary medicines in the environment, effects of degradation products, interactions of veterinary medicines and their mixtures with other classes of chemicals, and what, if any, role the environment plays in the transfer of antimicrobial resistance to humans and farm animals.

These studies will be challenging and will require input from ecologists, agronomists, ecotoxicologists, exposure modelers, analytical chemists, toxicologists, veterinarians, and medicinal chemists developing new drugs. If studies are executed in an integrated and thoughtful manner, we believe their results will address the question “Are veterinary medicines causing environmental risks?”

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL, SAFETY
AND POLLUTION PREVENTION

JAN 14 2013

Erick Wolf
Innolytics, LLC
P.O. Box 675935
Rancho Santa Fe, CA 92067

Subject: Amendment to add cracked corn as a pre-bait option
EPA Registration No.: 80224-1
Primary Brand Name: OvoControl P
Submission Date: November 30, 2012

Dear Mr. Wolf:

The label referred to above, submitted under FIFRA, as amended, is **acceptable**. Please submit one final printed copy for the above mentioned label before releasing the product for shipment. If you have any questions, please contact Gene Benbow at (703) 347-0235 or via email at benbow.gene@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "John Hebert", written in a cursive style.

John Hebert
Product Manager 07
Insecticide-Rodenticide Branch
Registration Division (7505P)



Innolytics, LLC
The Humane Hatch Control Company

ACCEPTED
JAN 14 2013
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
Registered under
EPA Reg. No. 80224-1

OvoControl® P
Ready-to-Use Bait
(EPA Reg No: 80224-1)

FOR USE IN REDUCING EGG HATCH IN PIGEONS
(Columba livia, Rock Dove, Feral Pigeon)

ACTIVE INGREDIENT

Nicarbazin..... 0.5%

INERT INGREDIENTS..... 99.5%

TOTAL..... 100.0%

KEEP OUT OF REACH OF CHILDREN
CAUTION

PRECAUCION: Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle.

Precautionary Statements

Hazards to Humans and Domestic Animals:

CAUTION: Causes moderate eye irritation. Remove and wash contaminated clothing before reuse. Avoid contact with eyes or clothing. Wear protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear: Long sleeved shirt and long pants, socks, shoes and gloves.

First Aid

If in Eyes	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
Note to Physician: Treat symptomatically.	

Label ver: 11.30.2012A

Manufactured by: Innolytics, LLC, P.O. Box 675935, Rancho Santa Fe, CA 92067
EPA Reg. No: 80224-1
EPA Est. No.: 009811-ID-001
Net Weight: 30 pounds (13.61 kgs)
For Technical Support and Information Call: 858.759.8012

Important!

Read This Entire Label Before Using This Product: Replace label in pouch and reseal after reading.

Environmental Hazards

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

Information

OvoControl P is a ready-to-use bait designed for administration only to pigeons only in urban areas. In order to achieve efficacy, OvoControl P must be fed daily during the nesting period and consistently consumed by the pigeons. OvoControl P reduces egg hatchability and functions as an aid in an integrated pigeon management program. Pigeons fed OvoControl P according to label directions may continue to lay eggs, although the hatch rate will be reduced.

This product will reduce egg hatchability and adversely affect other aspects of reproduction in all avian species.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Use Restrictions

- OvoControl P may only be used in urban areas. Specific use sites include office parks, malls, institutions (e.g., hospitals and schools), bridges, airports, and other commercial and industrial buildings or structures.
- OvoControl P may only be applied to rooftops or other flat paved or concrete surfaces. Use only in secured areas with limited public access.
- Applicators must ensure that children and pets do not come in contact with the bait.
- Do not apply within 20 feet of any body of water, including lakes, ponds or rivers.
- Not for use in Guam, American Samoa, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.
- See additional restrictions under Non-target Species.

Additional Requirements for use in Hawaii

- ✓ Prior to application, applicator must contact the Department of Land and Natural Resources and obtain a Wildlife Control Permit if one is required.
- ✓ Do not apply in areas where nene goose (*Nesochen sandvicensis*), Hawaiian coot (*Fulica alai*), Hawaiian moorhen (*Gallinula chloropus sandvicensis*) and Hawaiian duck (*Anas wyvilliana*) are known to occupy or graze.
- ✓ Users must notify the Pesticides Branch of the State of Hawaii Department of Agriculture, in writing prior to use. Two weeks advance notice must be given to allow time for consultation with Hawaii Department of Land and Natural Resources and the U.S. Fish and Wildlife Service.
- ✓ Observe warnings under the **Non-Target Species** section of the label. In Hawaii, Zebra doves (aka, Barred Ground dove, Blue-faced dove) *Geopelia striata*; Mountain doves (aka, Spotted dove, Chinese dove, Pearl-necked dove, Lace-necked dove) *Spilopelia chinensis*; and Common myna (aka, Common mynah, Indian myna) *Acridotheres tristis*, are exempt from the non-target restrictions.

Application Rate and Directions

Depending on the climatic zone and habitat, pigeons nest seasonally or year-round. Begin baiting prior to breeding and nesting in your area. Pigeons must be conditioned to the baiting program. Conditioning is a process whereby

OvoControl P is applied by the intended method of application each day at approximately the same time to train the pigeons to consume the bait. Pigeons are fully conditioned when they return to the same site each day for bait. The conditioning period can last from five (5) to fourteen (14) days, depending on site characteristics and pigeon behavior. If pigeons cannot be conditioned to the feeding program within 14 days, discontinue treatment at that site.

Begin by applying a small quantity of bait (1 ounce/30birds) and confirm by visual observation that the pigeons eat it and that non-targets are not feeding on it. Do not apply if non-target feeding persists and/or cannot be prevented. Whole kernel or cracked corn or other grains may be mixed into the bait, broadcast or applied in bait pans to help attract apprehensive pigeons. Each day, gradually increase the amount of bait applied up to a maximum of 1 ounce per 5 pigeons per day. Remove any excess bait after feeding.

Depending on site characteristics and conditions, the applicator may choose to pre-bait the birds. Apply 0.5lb to 1.0lb of whole or cracked corn or other grains daily to condition the birds to the feeding site and baiting routine. Follow up in 7-10 days to evaluate the baiting area. If pre-bait is consumed consistently, gradually transition the birds from the pre-bait to OvoControl. Follow the directions for conditioning birds to ensure pigeons are consuming the bait.

Apply OvoControl P to pigeons in urban areas during the early morning on flat rooftops in close proximity to the location where they are known to roost or loaf. If a flat rooftop is not available, identify a suitable flat paved or concrete surface appropriate for the application of OvoControl P. Choose secured areas with limited public access.

If rain is a factor in the area, locate baiting area under partial cover or canopy. Do not apply bait to areas where water may accumulate. Do not apply bait to standing water.

Feeding must continue DAILY through the entire nesting period, which can last all year. By the end of the conditioning period, the daily dose (based on flock size) must be entirely consumed within one (1) hour of application. After one hour, remove any uneaten bait. The daily amount of bait applied must be increased or decreased according to the number of pigeons at the site.

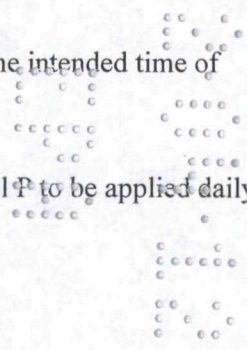
The application rate is based on a daily flock count, which must be performed just prior to the intended time of application.

Dosage Calculation:

Estimated pigeon population x 0.2 ounces (5 grams) OvoControl P = Amount of OvoControl P to be applied daily.

For example,

- 2 ounces of bait = 10 pigeons
- 8 ounces of bait = 40 pigeons
- 1 pound of bait = 80 pigeons
- 5 pounds of bait = 400 pigeons
- 10 pounds of bait = 800 pigeons
- 30 pounds of bait = 2,400 pigeons



Pigeons have a social order and baiting strategy must accommodate their behavior. Bait must be distributed to allow all birds opportunity to consume the bait. Depending on the site characteristics and number of pigeons, bait may be applied either with bait pans or broadcast as follows,

1) Bait Pans

Bait pans are appropriate for smaller sites with less than 50 birds. Use bait pans, trays or bowls made of durable plastic or metal, perforated to allow drainage. Use a sufficient number of trays and place them in a manner to accommodate all pigeons and to ensure that each pigeon has the opportunity to consume bait. For best consumption, the placement of the bait pans can be adjusted daily, based on the prior day bait consumption, until the applicator believes the pigeons have the best opportunity to feed.

2) Broadcast Application

a. Hand broadcast

Broadcast bait in small, localized areas (up to a 20 ft radius) to accommodate feeding by pigeons. Broadcast application must allow all pigeons sufficient access to the bait for consumption.

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b. Mechanical feeders

For pigeon populations larger than 50 birds, mechanical feeders may be used. Adjust feeders to a broadcast radius of no more than 20 ft. Use multiple baiting sites to ensure that all the pigeons have the opportunity to consume the bait. Broadcast bait in areas where pigeons typically feed.

Follow the operating instructions on the mechanical feeder to set the correct application rate.

Non-target Species

Do not apply more OvoControl P than the pigeons will eat in a single feeding, as this may result in non-target species' exposure to leftover bait. Do not apply in urban areas where the product may be consumed by federally listed Threatened and Endangered birds. Daily observations for non-target species must be conducted for the entire five (5) to fourteen (14) day conditioning period after feeding begins.

Do not apply if non-target feeding persists and/or cannot be prevented. English house sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*) are exempt from this restriction. It is a violation of state and federal law to intentionally feed treated bait to non-target species, including protected species.

IMPORTANT: READ BEFORE USE

Read the entire **Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability** before using this product. If terms are not acceptable, return the unopened bag at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, it is impossible to eliminate all the risks associated with the use of this product. Lack of performance, inefficacy or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of Innolytics, LLC ("Innolytics"). All such risk shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INNOLYTICS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Innolytics is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, INNOLYTICS, THE MANUFACTURER, OR THE SELLER SHALL NOT BE LIABLE WHATSOEVER FOR ANY CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES, AND THE BUYER AND THE USER WAIVE ANY RIGHT THAT THEY MAY HAVE TO SUCH DAMAGES.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT INNOLYTICS' ELECTION, THE REPLACEMENT OF THE PRODUCT.

Storage and Disposal

Do not contaminate water, food or feed by storage and disposal.

Pesticide Storage: Store at or below room temperature. Store bait in a DRY location, free of other pests.

Pesticide Disposal: Wastes resulting from the use of this product must be disposed of at an approved waste disposal facility.

Container Disposal: If empty: Do not reuse this container. Place in trash or offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain. Keep unused bait dry.

THESE ARE THE DIRECTIONS FOR USE FOR OVOCONTROL. SINCE IT'S MORE OFTEN USED OUTSIDE FOR PIGEONS, GEESE AND DUCKS THIS IS VERY IMPORTANT TO READ HOW IT MUST BE USED! In pigeons for example because they breed all year bait must be placed at sites 365 days per year, application must be observed, must make certain non-target species are not in area potentially eating bait. etc.

<https://www.pigeoncontrolresourcecentre.org/html/reviews/ornitrol-ovocontrol-oral-contraceptives-for-pigeons.html#user>

OVERVIEW

Oral **birth** control is not commonly used for the control of birds and previous attempts to find an effective and humane oral contraceptive for the control of feral pigeons have been unsuccessful. Research is ongoing, however, to produce an oral contraceptive drug that can be fed to pigeons and other problem birds in an effort to reduce flock size humanely and in a cost-effective manner. Other methods of birth control that are commonly used to control pigeon flock size include the removal and replacement of eggs (from **artificial breeding facilities**) and, to a lesser extent, '**egg oiling**'. **Egg oiling** is an extremely effective method of bird control which involves immersing newly-laid eggs in paraffin BP to block the pores of the egg, denying oxygen to the undeveloped foetus. **Egg oiling** and **egg removal/replacement** are both tried and tested methods of birth control that are considered to be highly effective in the control of pigeons and other birds alike. The use of '**egg oiling**' as a method of control is discussed, in detail, in a dedicated product/service review entitled '**Egg oiling**'. Schemes involving egg removal/egg replacement from artificial breeding facilities are discussed in the '**Artificial breeding facilities**' product review.

At present there are no oral contraceptives available in the UK that are licensed for use with pigeons or any other birds. The **Department of the Environment, Food and Rural Affairs** (DEFRA) has confirmed that although it has commissioned research into contraceptives for animals, it has not been in a position to commission research into contraceptives designed to be used for birds. This is because all species of birds are protected in the UK whereas the same cannot be said of animals and their lack of **legal protection** allows trials of this nature to be carried out.

Oral contraceptives for birds are far from common and those that have made it into the commercial marketplace have not been popular nor sold well. The best known avian oral contraceptive is a drug called Ornitrol that was developed for use as a bird and animal contraceptive on the back of its development as a cholesterol

inhibitor in humans. The active ingredient diazacon (20,25 diazacholesterol) is a cholesterol mimic that inhibits cholesterol production and blocks steroid hormone formation. The reason that the drug was first considered for bird control was based on the fact that as eggs contain cholesterol, diazacon may lower cholesterol at the same time as inhibiting reproduction. More importantly, diazacholesterol 20,25 may have the ability to block the production of hormones (estrogen, testosterone and progesterone), all necessary for reproduction. Tests were carried out using sparrows and pigeons and it was found that diazacholesterol 20,25 was effective in reducing reproduction in both species. As a result the product was registered as a means of controlling pigeon populations under the trade name of Ornitrol.

Ornitrol was designed to be used in the same way that **narcotic baits** such as Avitrol are used to kill pigeons, by feeding non-treated grain on the chosen site for 7-10 days and then substituting the treated grain for grain treated with Ornitrol. This treatment was sufficient to make female pigeons sterile for up to 6 months. The process is then repeated every 6 months indefinitely. Ornitrol administered to pigeons acts in the same way as a human birth control pill, if the drug is not consumed every 6 months female pigeons become fertile once more and continue to breed unhampered.

Ornitrol is now no longer produced but its development as a reproductive control has led to the current research and development of drugs such as OvoControl G and P, relatively new birth control drugs designed for use with Canada geese and feral pigeons respectively. Ornitrol was discontinued due to concerns about the long-term use of the drug and the fact that in the form it was produced it was easily and quickly consumed by non-target species. For use on birds like pigeons that breed all year round, Ornitrol would need to be used continually throughout the year and it was found that the drug caused muscle tremors in pigeons when used over long periods. Not only this, but the drug was also extremely expensive to provide on this basis.

OvoControl P is a drug produced by an American company called Innolytics that is designed to control the "hatchability of eggs", according to the manufacturer. The active ingredient of the contraceptive is nicarbazin, a drug originally used to control enteric disease in chickens. OvoControl works by interfering with the vitelline layer of the egg, separating the egg white from the yolk. The vitelline layer is a membrane that is vital for the development of an egg and without it the egg will not hatch.

Unlike Ornitrol, OvoControl P is fed to pigeons from day 1 but during the acclimatisation process (normally lasting between 5 and 14 days) OvoControl P is fed at a reduced level of 1 ounce (28 grammes) per 30 birds. As pigeons become acclimatised to feeding on the site OvoControl P can then be increased up to a maximum of 1 ounce (28 grammes) per 5 birds. The main criteria for the use of

OvoControl P is a site where pigeons can be encouraged to feed on a daily basis, ideally at the same time each day and where there are no non-target species present. The manufacturer suggests that OvoControl P should be fed in the early hours of the morning and ideally on flat rooftops or, if rooftops are not available, on flat paved areas that are consistent with the restrictions imposed on the use and distribution of the drug. Wherever possible OvoControl P should be fed to pigeons close to their roosts or daytime perching places.

The following chart outlines dosage per pigeon with the basic calculation being: estimated pigeon population x 0.2 ounces (5.5 grams) of OvoControl P = amount of OvoControl P to be fed daily.

- 2 ounces (56 grammes) of bait = 10 pigeons
- 8 ounces (224 grammes) of bait = 40 pigeons
- 1 pound (0.4 kilogramme) of bait = 80 pigeons
- 5 pounds (2.2 kilogrammes) of bait = 400 pigeons
- 10 pounds (4.4 kilogrammes) of bait = 800 pigeons
- 30 pounds (13.6 kilogrammes) of bait = 2,400 pigeons
- 2 cups of bait = 14 ounces (0.3 kilogrammes) = 70 pigeons
- 1 gal of bait = 112 ounces (3.1 kilogrammes) = 560 pigeons



Mechanical Distributor for OvoControl P

The manufacturer suggests that OvoControl P can be fed to pigeons using a variety of methods. Options include the use of various sized and shaped containers containing the drug in order to accommodate all pigeons feeding on the site, including dominant cock birds and submissive/juvenile birds. Containers must be perforated to allow drainage. This method is only recommended on sites where the flock consists of less than 50 birds. Other methods include hand feeding (broadcast distribution) where the drug is distributed over an area not more than 20 feet radius (6 metre radius) and mechanical feeding, a method used for pigeon flocks of more than 50 birds. The broadcast limit for mechanical feeders must be set to a radius of no more than 20 feet (6 metres). Mechanical feeders should only

be used on flat roof areas or flat paved areas that have restricted public access.

The recommended use of mechanical feeders suggests that OvoControl P can be used without the need for a human presence but this is not the case. Clearly a human presence is required to identify non-target species birds, to assess flock size prior to distributing OvoControl P, to remove OvoControl P in wet conditions and to ensure that children and pets do not come into contact with the drug. The suggested use of mechanical feeders, outlined on the OvoControl P website, is misleading and may result in some users simply ignoring the operational requirements of OvoControl P and distributing the drug indiscriminately.

There are a number of restrictions involved with the use of OvoControl P which include:

- **OvoControl P must be used throughout the entire breeding period – in pigeons this is 365 days a year and OvoControl must be distributed every day**
- **The human applicator must visit the site early in the morning to distribute OvoControl P**
- **The human applicator must thoroughly assess pigeon activity on the site prior to distributing OvoControl P and undertake a pigeon head count each day**
- **The human applicator must reduce/increase the volume of OvoControl P fed each day according to the results of the head count to ensure optimum coverage for the whole flock**
- The human applicator must ensure that children and pets do not come into contact with OvoControl P
- **The human applicator must remain on site for up to one hour to ensure that all the bait is eaten and to ensure that non-target species do not attempt to exploit the bait**
- The human applicator must ensure that no non-target species are feeding on site during the distribution process and whilst the bait is being consumed by pigeons or the applicator may be committing an offense. In the USA it is an offense to feed treated bait to protected, threatened and endangered birds
- Daily observations for non-target species birds must be carried out throughout the 5-14 day acclimatization period and once a week thereafter
- OvoControl P must not be used in rain and neither should the drug be used within 20 feet of any body of water including ponds, rivers and lakes – when distributed on rooftops or paved areas in wet conditions the area in which OvoControl P is to be distributed must be dry and ideally beneath some type of canopy
- OvoControl P can only be used in urban applications and on flat roof areas or paved areas where public access is restricted
- Health and safety must be assessed and health and safety restrictions include:

wearing protective eyewear (as OvoControl causes moderate eye irritation), washing all contaminated clothing before re-use, washing thoroughly after handling OvoControl P and before eating, drinking or smoking. Gloves, long-sleeved shirt and long trousers must be worn at all times when handling or distributing OvoControl P

The manufacturer confirms that OvoControl P will render all birds that take the bait sterile, including protected species, but claims that OvoControl P is manufactured and provided in a format that will only be palatable to pigeons. The manufacturer provides a very long list of restrictions for use, however, suggesting that exploitation by non-target species is a real concern and yet no formal training is required for human applicators. The most significant concerns raised in respect of all orally fed contraceptive drugs are their impact on non-target species. Although the manufacturer suggests that there is little likelihood of exploitation by non-target species, as a result of the size and shape of the bait, there is still an admission that the drug can be ingested by protected birds. The manufacturer suggests that a bird the size of a songbird or sparrow would not be interested in OvoControl P, but there is no advice or comment made in respect of larger birds exploiting the bait. The only mechanism available to stop non-target species exploiting the bait is the human applicator and the ability of that person to identify non-target species and to scare them from the site. Identification and the scaring of non-target species is also dependent on the human applicator remaining on-site, in all weather conditions, for the requisite 1 hour period following distribution. The only positive aspect of OvoControl P over drugs like Ornitrol is the fact that secondary toxicity cannot take place. According to the manufacturer, non-target effects can only result from direct ingestion of OvoControl P.

Health and safety guidance provided by the manufacturer also suggests that OvoControl P can cause "moderate eye irritation" to the human applicator. If the human applicator is required to wear protective eyewear as a result of concerns over safety, what affect will OvoControl have on the target species? It must be assumed that if OvoControl can cause moderate irritation to the human eye the same must apply to the avian eye, bringing health and safety of the target species into question. No mention is made of this fairly obvious welfare concern on the Innolytics website . Animal protection laws in the USA are far less comprehensive than equivalent legislation in the UK and the criteria required to attract a license for a new drug in the USA may be less challenging than criteria necessary for a similar application in the UK. If OvoControl P can cause irritation in the avian eye there is clearly the potential, in extreme cases, for sight to be compromised with potentially lethal consequences.

The most obvious problem associated with the use of OvoControl P to control pigeon populations is the cost of the control, not only in terms of the cost of the

drug itself but, more importantly, the cost in human time. For an individual to be expected to attend a rooftop site every day, 365 days a year and in all weathers, to spend upwards of an hour assessing pigeon activity, distributing bait and then watching for non-target species is a big ask for any property owner. The early hours of the morning are considered to be anti-social hours and therefore premium rates would have to be paid to employees undertaking the required tasks and protective clothing would also need to be provided. Not only this, but contaminated clothing must be washed prior to re-use and showering facilities may need to be provided on site. There is a great deal of responsibility placed on the individual/s carrying out the daily distribution and assessment works, not only to carry out a pigeon head count but also to ensure that non-target species do not exploit the bait and that no children and pets access the distribution area. If rain starts to fall it must be assumed that the human applicator must also be available to sweep up all the OvoControl P pellets before they become contaminated with water.

Any option to **control pigeon flock size humanely** and effectively must be viewed as a positive development and although trials suggest that OvoControl P can be effective in reducing pigeon flock size, the cost of the control and the question of welfare is inevitably brought into question. Following in the footsteps of Ornitrol, a poorly performing and extremely expensive contraceptive drug, it was incumbent on the manufacturer of OvoControl P to provide an option that outperformed Ornitrol in every department. To an extent Innolytics has achieved this by providing a drug that has few known side effects and which, they claim, is unlikely to be exploited by non-target species. If the drug is as effective as the manufacturer claims and assuming that the drug is unlikely to be exploited by non-target species, will the sheer cost of human interaction render it too expensive to use? Based on the information supplied by the manufacturer the answer to that question has to be a resounding "yes". Pest control budgets are notoriously low with most property owners budgeting only a few hundred pounds for all their pest control needs (including budgets for rodent control) so it seems highly unlikely that any company or individual will be prepared to put aside what must be considered to be a huge annual sum in order to use OvoControl P.

Although OvoControl P appears to have clear advantages as a means of **reducing the breeding potential** of the feral pigeon, the product offers little in the way of relief for the property owner experiencing entrenched pigeon-related problems. The manufacturer confirms that OvoControl P should be used as part of an overall control system rather than as a stand-alone control, but this begs the question - why would a property owner choose to use OvoControl P as well as conventional control options? The cost of using OvoControl P for one year would almost certainly allow most property owners to comprehensively protect their entire property with an industry standard anti-perching product. Once a property is

protected with a product like the **anti-roosting spike**, the property owner would have anything from 10-30 years of relief without the need to spend more money. If the same property owner used OvoControl and anti-perching products to protect their property the cost would not only be extreme in the first year (with the cost of **spikes** and OvoControl P) but the property owner would have to continue spending large sums every year for the continued use of OvoControl P.

For a city council or a government body that has responsibility for **area-wide pigeon control**, the use of OvoControl P may be considered as an option in an effort to reduce the size of urban pigeon flocks. For the individual or the commercial property owner, however, the product must be considered to be prohibitively expensive to use, offering far less value than conventional anti-perching and exclusion products. It is possible that council or government bodies could undertake area-wide trials, offering grants to property owners to trial the use of OvoControl P on their sites or properties, but it is hard to see any application for the product for the average property or site.

DEFRA's view:

As there are no avian oral contraceptive drugs available in the UK at present, DEFRA does not discuss this control option on its website. A spokesperson for DEFRA did confirm, however, that should a product like OvoControl P be made available in the UK, all the science involved with the drug as well as details of the preferred delivery mechanisms would be required in order to make a decision as to whether that drug was suitable to be licenced for use in the UK.

The Health and safety Executive (HSE) confirmed that any employer using a birth control product on their site must carry out an in-depth risk assessment confirming that the product is safe to use and also confirming that the use of the product on-site conforms to Section 2 of the Health and Safety at Work Act. The HSE also confirmed that the manufacturer of the product has a duty to divulge any and all information about the product via a detailed data sheet. Any drug used to induce sterility in a bird would be listed as a product that is potentially hazardous to human health and as such would be listed as such under the Control of Substances Hazardous to Health Act.

Price range:

The cost of OvoControl P is \$4.88 per lb. In real terms this equates to approximately \$6 a day to treat 100 pigeons Mechanical feeders are available for automatic distribution of OvoControl P:

- Durable Baked on Green Scatter Feeder \$500.00
- 22 gauge Galvanised Finish Feeder \$450.00
- Optional Green or Galvanised Solar Panel \$75.00

Editorial comments:

The use of oral contraceptives for bird control has been debated internationally for decades with early research in Europe drawing few conclusions about their effectiveness or whether chemosterilants should be used at all. Swiss trials found that it was impossible to isolate feral flocks in order to assess whether contraceptives could be used to reduce breeding. Because pigeons are highly mobile, using multiple feeding sites each day, the same birds could not be relied upon to visit test sites each and every day, particularly at the precise time that treated grain was being offered. Pigeons from specific feeding flocks were also found to integrate with other feeding flocks on an irregular basis, rendering any data collected corrupt. Laboratory experiments can be undertaken to assess the effectiveness of contraceptives, but laboratory environments do not, in any way, mimic the pigeon's natural habitat.

The only oral contraceptive available that is designed specifically for use with pigeons is OvoControl P with its sister product OvoControl G, used for the control of Canada geese. Both products have been passed for use in the USA by the US Environmental Protection Agency (EPA), but standards adopted by EPA are unlikely to be considered acceptable in the UK and some other European countries. Trials undertaken by the manufacturer of OvoControl P in Italy have apparently provided some quite astonishing results with reductions of up to 50% in under two years, but no detailed information is available about these trials on the Innolytics website. As Innolytics suggest that OvoControl P should be used as part of a comprehensive control regime it is quite possible that culling was used as an additional control to compliment the use of OvoControl P. This may account for the unusually large reduction in flock size in such a relatively short period. It should also be noted that many US companies trial their products in Italy and although there is no obvious reason why this should be the case, it is possible that Italy has relaxed animal protection laws as does the USA.

Other methods of breeding control do achieve extraordinary results, such as the use of **artificial breeding facilities** where eggs are removed and replaced with **dummy eggs** on a weekly basis. This control, pioneered by the UK-based Pigeon Control Advisory Service (PiCAS International), is now used extensively across Europe and has been found to **reduce flock size** dramatically and within short time frames. The **egg removal/replacement** method of control is not labour intensive (5 minutes a week to remove and replace eggs), costs virtually nothing and stops all breeding taking place within the breeding facility. OvoControl P, relative to this control option, is extremely expensive, is not guaranteed to be effective and offers the property owner on whose building the problem exists, no relief whatsoever. Pigeons will quickly learn to use **artificial breeding facilities**, even if their existing

roosts are left unprotected and once established within lofts the birds will breed openly, irrespective of whether their eggs are interfered with or not.

OvoControl P is a good idea but fatally flawed in terms of its operational costs and the need to continue to offer the control indefinitely. OvoControl must be provided every day, 365 days a year, no exceptions. Most property owners that experience problems with pigeons do not have pigeons roosting overnight and breeding on their property, they simply have daytime perching problems where pigeons are using their property for the purposes of exploiting a food source. For these property owners to use OvoControl P as well as installing anti-perching products does not make sense. OvoControl P is designed to **reduce flock size** by birth control, a long-term goal, whereas anti-perching products will provide any property owner with instant and comprehensive relief, assuming that the product has been installed as per manufacturers' recommendations. For local authorities to use oral contraceptives in order to reduce flock size in an effort to provide property owners with some long-term relief (and spend less on purchasing deterrents) makes perfect sense and is a control option that would justify the use of public money to provide. To expect individuals and property owners to employ controls of this nature is simply pushing the envelope a little too far.

Although the manufacturer of OvoControl P suggests that there is little if no chance of non-target species taking the bait, there is no doubt that if this were the case the product would be recommended for much wider use. OvoControl P has been designed in such a way that it is difficult for smaller birds to exploit, but not impossible. There is also the issue of larger birds taking the bait. Whether or not non-target species are able or inclined to take the bait is critically important to the success of any type of contraceptive and until such a time as a product is designed that is species-specific and that cannot be exploited by non-target species, this control option will inevitably have its critics.

The issue of health and safety, not only for the human applicator of the product but also for the target species, is another issue that needs further research and investigation. A product that can cause "moderate irritation" to human eyes will almost certainly have the same effect on avian eyes. Although it must be borne in mind that the USA, where this product is approved for use, has far more relaxed animal protection laws than the UK, there is no doubt that this issue of potential suffering will be a cause for concern in the UK and many European countries. It is unlikely that OvoControl P will be introduced into the UK in the foreseeable future and if the product was introduced in its present format it is unlikely to be approved for use by **DEFRA** or the **HSE**.

Also commonly known as:

Ornitrol, OvoControl, OvoControl P, ovoControl G, the pigeon pill, pigeon contraceptive

Relevance to pigeon control:

Oral birth control is used as a method of pigeon control

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TESTIMONY FROM DEPARTMENT OF AGRICULTURE
SCOTT E. ENRIGHT CHAIRPERSON, BOARD OF AGRICULTURE
BEFORE THE HOUSE COMMITTEE ON AGRICULTURE THURSDAY, **MARCH
20, 2014**

HOUSE CONCURRENT RESOLUTION 54 REQUESTING THE DEPARTMENT OF
AGRICULTURE TO EXTEND THE USE OF **OVOCONTROL** TO FERAL CHICKENS

...Ovocontrol is oral contraceptive bait that is a general use pesticide approved for controlling large pigeon populations. The resolution asks that the HDOA accomplish this request by filing a special local needs registration with the United States Environmental Protection Agency (EPA). The HDOA has concerns with this resolution, as it believes other methods to control feral chicken populations should be considered before use of OvoControl, in view of the potential impact on non-target species and a lack of data on possible human health consequences of such a choice.

...

There is no data on the safety of human consumption on treated feral chickens or eggs with OvoControl in their system.

...

Whether the OvoControl manufacturer applied to EPA to register OvoControl for use on feral chickens or whether HDOA applied to do so through a special local needs registration, studies would need to be conducted to determine whether or not it is safe to consume OvoControl treated feral chickens or eggs.

...

As a part of a special local needs registration, HDOA would need to gather data on feral chickens and OvoControl, including proper dosage of OvoControl for feral chickens, efficacy of OvoControl on feral chickens, optimal size of pellets to feed feral chickens, and optimal type of pellet feeders to induce feral chicken feeding and avoid non-target species feeding, to the extent possible.

Such data collection would be manpower intensive, would be estimated to take over a year to conduct, and given the strains on its limited staffing, HDOA would need to request an appropriation for the data collection.

HDOA would also need to file a Section 7 request with the U.S. Fish and Wildlife Service to determine whether use in the sites listed on

the label would result in any unreasonable effects on threatened or endangered species.

...

For example, an area where feral chickens are frequently a problem, especially on Kauai, is golf courses. Nene also inhabit golf courses on Kauai, so there seems to be a risk of exposure to an endangered species if OvoControl is used on or near golf courses and other areas where Nene are found.

HDOA notes that, ordinarily, it is the pesticide manufacturer/registrant who applies to EPA to register a new use for an already approved pesticide product and who develops the necessary data to support the new use, as the manufacturer/registrant stands to profit if increased sales result from the new use. As discussed above, as a part of a special local need registration, an applicant, which could be the State or an individual farmer, must test a registered pesticide on a crop or pest not listed on the pesticide label in order to develop data to support EPA registration for the new use. This procedure has been particularly useful when trying to control newly introduced and damaging agricultural or environmental pests or trying to find a pesticide appropriate for minor crops of local importance to Hawaii. In view of this background, having the State initiate a special local need registration does not seem to be an appropriate way to extend OvoControl use to feral chickens in Hawaii.

SB-2195-SD-2

Submitted on: 3/17/2022 8:59:57 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Inga Gibson	Pono Advocacy	Support	Written Testimony Only

Comments:

Dear Chair Hashem and Members of the House Agriculture Committee

Please accept my **STRONG SUPPORT** for SB2195, which would create a 5 year pilot project to humanely control feral fowl across Hawaii.

I have worked with the manufacturer of the product for more than a decade and have seen first hand the effectiveness of OvoControl, which prevents eggs from hatching, thereby reducing populations of feral fowl. This product coupled with targeted humane trapping efforts will help to reduce the population. Trapping and killing alone will not effectively reduce populations.

This product is safe for use around people and pets as it only effects avian species. Part of the project would ensure that the feed (treated with nicarbazin) would not be administered in areas where there are protected bird species. However, it's effects are reversible if a protected bird only occasionally consumes the treated bait.

I encourage the Committee to pass this bill and work with Innolytics, the sole manufacturer, who has pledged support to the state to assist in this project and the necessary SLN permit through the EPA and DOH.

Thank you for your consideration of my strong support.

Inga Gibson



Innolytics, LLC
The Pigeon Control Company

17 March 2022

Ref: SB 2195

Sub: MANAGEMENT OF FERAL FOWL IN HAWAII WITH OVOCONTROL®
(NICARBAZIN 0.5%)

Innolytics is the manufacturer of OvoControl P, an avian contraceptive registered by EPA (Reg. No. 80224-1) for use in pigeons and other pest birds listed on the label. Fed daily in form of a kibble, OvoControl interferes with egg fertilization. Treated birds lay infertile eggs.

All birds are considered sensitive to the contraceptive effects of nicarbazin. In fact, nicarbazin was originally developed as a coccidiostat for use in chickens and remains in widespread use today. The development of OvoControl as a contraceptive for pest birds was based on the unwanted side effect when nicarbazin is inadvertently fed to breeder chickens. Nicarbazin is registered by FDA as a medicated feed additive for the control of coccidiosis. Use in pest birds as a contraceptive is regulated by EPA.

Problematic feral chickens are peculiar to Hawaii. Since the market is so small and specialized, the company has no incentive to register the use with EPA on a national scale. For these circumstances, FIFRA includes a provision for individual state approval for “Special Local Needs” (SLN) or Section 24(c). This registration is the responsibility of the State Department of Agriculture.

OvoControl will be dispensed manually to feral chicken flocks, and we remain confident that the product can be used safely and effectively in these birds.

Furthermore, we are happy to consult with the state agencies in developing the most effective feeding protocol to ensure that there is little if any risk to non-target species.

Thank you for your consideration.

Erick Wolf
CEO

48701 San Pedro Street, La Quinta, CA 92253
Tel: 949.388.3671 – FAX: 760.282.3080 – email: erick.wolf@ovocontrol.com

SB-2195-SD-2

Submitted on: 3/16/2022 11:27:12 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ingrid & Albert Lagunte	Makor Acupuncture & Oriental Medicine	Support	Written Testimony Only

Comments:

We strongly support SB2195 and urge it's approval and passage!

The growing feral chicken/rooster population on Oahu has significantly adversely impacted our living environment and business associations.

The feral fowl have grown to a point of being out of control, where they are a major daily noise nuisance that affects the community day and night. Moreover, the feral chickens/roosters are very aggressive,destructive and have damaged repeatedly our native plants and shrubs.

Whether it be in residential neighborhoods, state parks or even in business shopping areas, the feral fowl are everywhere and this bill supports the strong need to eradicate the feral fowl population.

Along with eradication, perhaps options for allowing a vendor to collect the feral fowl to give to farms and/or to provide food for agencies that serve the homeless communities, can be incorporated in to the implementation of the eradication efforts.

Please approve and pass legislation on SB2195.



Hawaiian Humane Society
People for animals. Animals for people.

2700 Waiialae Avenue Honolulu, Hawaii 96826
808.356.2200 • HawaiianHumane.org

Date: March 16, 2022

To: Chair Rep. Mark J. Hashem
Vice Chair Rep. Amy A. Perruso
and Members of the Committee on Agriculture

Submitted By: Stephanie Kendrick, Community Engagement Director
Hawaiian Humane Society, 808-356-2217

RE: Support, with an amendment, for SB 2195, SD2: Relating to Fowl
Friday, March 18, 2022, 9 a.m., Room 325 or Videoconference

Aloha Chair Hashem, Vice Chair Perruso, and Committee Members.

On behalf of the Hawaiian Humane Society, thank you for considering our support for Senate Bill 2195, SD2, which establishes a 5-year pilot program within the Department of Health to eradicate feral chickens in the State, requires the Department of Agriculture to submit a special local need registration to the United States Environmental Protection Agency, and makes an appropriation.

Hawaiian Humane has long advocated for the adoption of a birth control program to reduce the population of feral chickens across our state and we are thrilled that the sponsors of SB2195, SD2, and their colleagues have endorsed that approach in this bill.

Feral chickens have grown in population largely due to irresponsible behavior by cock fighting operations. Stronger enforcement against those operations is another important strategy to curb this population. For the birds that are already on the landscape, however, mixing contraceptive bait into feed is a more humane and less costly alternative than lethal control. OvoControl, an approved contraceptive bait to prevent the breeding of pigeons in Hawai'i, is also effective in chickens and can be made available for that purpose if HDOA submits a special local need registration to the United States Environmental Protection Agency.

We urge you to pass this bill and allow public and private landowners across our islands to have a humane option for controlling feral chickens.

Mahalo for your consideration.

SB-2195-SD-2

Submitted on: 3/15/2022 7:00:26 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Vladimir Korolev	Individual	Support	Written Testimony Only

Comments:

As a property owner of several apartment buildings, and on behalf of my tenants, we strongly support this bill!

Although I am an animal lover, the hard reality is that feral chickens and roosters create a lot of noise, roadway hazards and moreover, serious property damage throughout our community! Propagation control is not the answer as it does not address these serious issues of noise, roadway hazards and damage. It is only by eradication of the feral fowl that we can correct the serious problems we face in the community with the feral fowl.

For example, at our 37 unit apartment building in Aiea, Juliana Towers Apartments, what started out two years ago as two feral chickens street-side has exploded to more than 50 on the makai side of the building, 15 on the Ewa side of the building and approximately 25 on the mauka side of the building. There is simply no escaping the noise and the property damage that this feral fowl population is causing!!

At our properties, we have many military members and medical professionals who work graveyard shifts and sadly, they have difficulty sleeping in during the day due to the feral fowl noise nuisance.

Further, as a business, it has been extremely expensive for us to landscape our properties with trees, native plants, shrubs, lawns, etc., only to have the feral chickens create so much damage that we now face the need to completely cement the area, as replanting will only lead to more damage. On our ocean side of the building, where we have cypress trees and other landscaping, the feral chickens and roosters have created such extreme damage that there is significant soil erosion on to the street and in to the storm water drainage area.

Although we have always striven to keep our property 'green' with native plants and shrubs, we can no longer afford to do so as the feral fowl are back the same day for more damage! Yet, by not landscaping, reportedly there is talk in the state that properties could be taxed in the future at a higher tax rate based on their level of landscaping! We want to landscape and to keep our neighborhood 'green', but to undertake expensive landscaping only to have the area damaged by the feral fowl and then risk having our properties taxed at a higher real property rate is like a double edged sword!

Please approve and pass SB 2195!

Thank you!

SB-2195-SD-2

Submitted on: 3/15/2022 7:07:40 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Dr. Majid Joneidi	Individual	Support	Written Testimony Only

Comments:

I strongly support this bill and urge the House to approve passage of this bill!

Having grown up and lived in Waimalu, Aiea nearly my whole life, I've seen in recent years how the neighborhood has gone 'downhill' due to the dramatic increase in the number of feral chickens in the neighborhood!

The feral fowl have been a noise nuisance, roadway safety hazard and most of all, very destructive at any and all landscaping within their reach! We have spent thousands on landscaping our residence with native plants and flora, only to find, repeatedly, that the feral fowl forage and dig up everything!

We need the governments support to eradicate the problem, including perhaps for feral fowl catches to be given to the IHS for feeding the homeless, paying a bounty for someone to take the feral fowl out to farms, etc..

I urge you to kindly support and pass this bill!

Thank you!

Dr. Majid Joneidi

SB-2195-SD-2

Submitted on: 3/15/2022 7:19:28 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Alexander Esin	Individual	Support	Written Testimony Only

Comments:

This bill is long overdue and in immediate need for implementation to correct the ever-growing, serious issues of feral chickens/roosters throughout the State of Hawaii!

In so many neighborhoods, from Hawaii Kai to Kakaako, from Aiea/Pearl City to Makaha Valley, the feral fowl population is out of control. Frankly, it's even an issue at the Honolulu International Airport and at the Lihue Airport too!

The feral fowl are a serious noise nuisance, create many safety hazards and are very destructive to native plants and vegetation.

In the Waimalu, Aiea area alone, there are currently close to 100 feral chickens in the Lokowai Place, Lokowai Street, Kanuku Street and Li'Ipo Street areas alone! And yet, it started out as only 2 as recently as 2-3 years ago but has grown to a proportion that it is out of control!

Instituting a birth control process to inhibited the propagation of the population is not the answer as it does not address, in residential and business communities, the serious issues of noise nuisance, roadway safety issues and the property damaged caused by foraging feral chickens and roosters.

With all due respect, I urge you to approve and to pass SB2195!

Thank you!

Alexander Esin

SB-2195-SD-2

Submitted on: 3/15/2022 7:30:05 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Murdoch Ortiz	Individual	Support	Written Testimony Only

Comments:

I strongly encourage that SB2195 be approved in its entirety!

The feral fowl population on Oahu, and in fact, throughout the State, is out of control!

Whether it be in State Parks, residential neighborhoods or in business communities, throughout the State the feral fowl population has reached a critical point of an immediate need to eradicate the feral fowl population.

In the Waimalu, Aiea area alone, the feral fowl population is in the hundreds and has become a very serious noise nuisance and health/safety hazard. Further, the hens with chicks are very aggressive and have even attempted to attack bypassers who get near to the chicks. However, this problem is not unique to Aiea alone and is prevalent throughout the State.

The only solution is eradication as inhibiting the feral fowl population growth through birth control means, etc., does not address the serious issues of roadway safety risks, significant damage to gardens, yards and flowerbeds nor diminish the serious noise nuisance .

SB2195 is long overdue and I urge that the House approve and pass this bill!

Thank you!

SB-2195-SD-2

Submitted on: 3/15/2022 7:35:22 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Sharon Peine	Individual	Support	Written Testimony Only

Comments:

SB2195 regarding the serious issue of feral fowl throughout our State is long overdue and in need of immediate approval and implementation!

Although I am a dedicated animal lover, the feral fowl population is out of control, creates a serious noise disturbance issue throughout the day and night and equally important, has led to significant repeat damage to our native floral, shrubs, gardens and yards!

Please approve and pass this bill and further, take steps to expedite the implementation of eradicating the out of control feral fowl population throughout Hawaii!

SB-2195-SD-2

Submitted on: 3/15/2022 7:37:11 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Leah Tait	Individual	Oppose	Written Testimony Only

Comments:

Feral chickens are an essential piece of Hawaiian history and have been part of its identity for centuries

Eradicating them would mean losing such an important part of the Hawaiian landscape and culture. It would be akin to poisoning the wild mustangs in the American West! They may not be technically “native” but have deep roots and deserve protection, not eradication. The dangerous method of eradication proposed could harm the other bird species it's meant to protect. I strongly oppose this bill and urge you to reject it.

SB-2195-SD-2

Submitted on: 3/15/2022 7:45:12 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Robert Peine	Individual	Support	Written Testimony Only

Comments:

I strongly support passage of SB2195 to eradicate the feral fowl population in the State.

At my residence in Aiea, the feral fowl are all over the streets, in our yards and gardens and keep up so many residents with their crowing and cackling throughout the day and night. And yet, the overgrown feral fowl population is not unique to Aiea; one can go nearly anywhere on any island and find feral fowl roaming the streets creating roadway safety risks, foraging and damaging gardens and native plants and being a serious noise nuisance to residents and visitors alike!

Even though I am a dedicated animal lover, the feral fowl population can only be corrected with means to eradicate as trying to slow down their population growth does not address the serious problems of noise nuisance, property damage and roadway safety hazards. Hence, I fully support this bill and encourage the House to take immediate steps to implement an eradication effort for the overgrown feral fowl population in Hawaii.

Please approve and pass this bill!

Thank you!

SB-2195-SD-2

Submitted on: 3/15/2022 7:49:44 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jennifer Anastasi	Individual	Oppose	Written Testimony Only

Comments:

I strongly oppose and rebuke this bill as I do not find the wild chickens to be a nuisance or a threat to the Islands. There are more destructive nuisances that must be considered before suggesting to give birth control to the chickens. This will cause a trickle down impact on Hawaiian Endemic Wildlife. The Native birds is what I am concerned for. How will this birth control affect the animals, land, water, people? What are the long term consequences...

SB-2195-SD-2

Submitted on: 3/15/2022 7:50:11 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jesseca Hill	Individual	Oppose	Written Testimony Only

Comments:

OvoControl contraceptive has shown many signs that it is not a reliable source to eradicate only one species. There is no way to prevent other animals from consuming the contraceptive. Furthermore, the contraceptive causes heat stress on fowl that take it. There are risks of OvoControl contaminating nearby waters and soil. There are many sustainable alternatives to controlling the population of the beloved Hawai'i chicken. OvoControl is not a step in the right direction and may even have lethal effects on not only Hawai'i chickens but the environment and other animals who call it home. My experiences with chickens have given me the drive to write this today. My four wonderful chickens have given me the love and care I needed in my life and it hurts me to see people think of them as a nuisance who instead of deserving to be rescued, deserved to be given a contraceptive that will eradicate them over time. They are intelligent, loving, and beautiful creatures who deserve the help of humans. If the situation was different and involved man's best friend, a dog or a cat, the circumstances would change in an instant. People would push themselves to rescue these animals instead of giving them a dangerous contraceptive. Chickens deserve the same love and care as any pet should. So I ask of you to not go through with using OvoControl on chickens. More sustainable methods would have a greater impact not just on the chickens but on the Hawai'i community as a whole.

SB-2195-SD-2

Submitted on: 3/15/2022 7:52:23 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Karen Loomis	Individual	Support	Written Testimony Only

Comments:

I am testifying in support of SB2195 SD2 relating to feral chickens. As a long time resident of Mililani, I have observed a significant increase in feral chickens throughout the community in the past several years. The chickens move around throughout the area, occupying trees and other common areas and making noise at all times of the day and night, detracting from the quality of life for residents. Existing regulations rely on linking the presence of the chickens to a property owner, but this has not been successful in reducing the population. I am not sure that the Department of Health is the most appropriate agency to deal with this problem, so would also welcome other alternatives to reduce the population of feral chickens.

Thank you for the opportunity to testify on this matter.

Karen Loomis

94-599 Mulehu St. Mililani, HI 96789

SB-2195-SD-2

Submitted on: 3/15/2022 7:58:40 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Maria White	Individual	Support	Written Testimony Only

Comments:

Please approve and pass this bill!

Feral chickens and roosters are all over the residential neighborhoods and its simply impossible to have a good nights sleep! The feral fowl start crowing as early as early as 3:00 AM and it continues on throughout the day and night!

The population of the wild chickens and roosters has gotten way out of hand and it is impossible to keep a landscaped yard, garden or flower bed! We should all be striving to keep Hawaii "green" with native plants and vegetation but the serious feral fowl population makes it impossible to maintain any type of garden or flower bed!

Please approve and pass this bill!

Mahalo!

SB-2195-SD-2

Submitted on: 3/15/2022 8:01:28 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Tim Streitz	Individual	Support	Written Testimony Only

Comments:

I strongly support a statewide program to eradicate the feral chicken population, which spans from rural to urban areas. However, I urge amending the bill to establish the program permanently with perhaps excess pilot funding.

Additionally, please amend to incorporate the following concepts:

- The pilot funding will be most useful to hire a statewide coordinator, or even a coordinator for each county, to work with residents to identify problems (e.g., determining responsibility when nuisance roosters cross property lines, identifying “hot spots” to target, providing education material on rules and resources, etc.). Coordinators should also assist in captures as their time permits. Expedited hiring of the coordinator must be ensured since time is of the essence.
- Allow flexibility in funding so that it can be used in innovative ways, such as to assist local start-up companies and private contractors, or to pay bounties.
- Establish a task force of residents and officials from each level of government to work on programs and policies that further assist in efficiently addressing the problem.

The McCully-Moiliili Neighborhood Board previously adopted resolutions directed at the City and County of Honolulu, but their content should also be considered as part of these State efforts:

1. <https://tinyurl.com/y9cxfhkf>
2. <https://tinyurl.com/fs9tuzpm>

Tim Streitz

McCully-Moiliili

SB-2195-SD-2

Submitted on: 3/15/2022 9:52:24 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
patrick coan	Individual	Oppose	Written Testimony Only

Comments:

oahu is not kauai. our chickens are our food source, why should we freight in more eggs when we can eat organic actual free range right from our yard. keep your overbearing politics on oahu. you want to use some crazy poison bait to screw up the egg laying cycle of birds, and you don't think that other birds and animals might consume this poison? this poison you are not supposed to use in wet environments. do you not see the cognitive breakdown in this? go fix your rail.

SB-2195-SD-2

Submitted on: 3/16/2022 8:31:16 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
John PATRICK WELLER	Individual	Oppose	Written Testimony Only

Comments:

I am a Hawaiian tourist and have fallen in love with Kauai - due in large part to the "native" chickens roaming the island! They are so charming and beautiful, and unique to Kauai. It's these chickens that draws me back to Kauai on every visit. If they were eradicated, I would not return - it would be too heartbreaking a tragedy!

Feral chickens are an essential piece of Hawaiian history and have been part of its identity for centuries! Eradicating them would mean losing such an important part of the Hawaiian landscape and culture. It would be akin to poisoning the wild mustangs in the American West! They may not be technically "native" but have deep roots and deserve protection, not eradication. The dangerous method of eradication proposed could harm the other bird species it's meant to protect. I strongly oppose this bill and urge you to reject it.

SB-2195-SD-2

Submitted on: 3/16/2022 9:27:01 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Ryden Iwamoto	Individual	Support	Written Testimony Only

Comments:

Chair Hashem, Vice-Chair Perruso, and distinguished committee members:

My name is Ryden Iwamoto and I am testifying in strong support of SB2195. I live on the edge of a gulch in Aiea, which is home to many feral chickens. Like many wild animals, they are a serious nuisance to my family and my neighbors. There have been several roosters over the years (of which there are none now, fortunately) that crow at random times throughout the day. Sometimes they are "normal" roosters and crow in the morning. At other times they are abnormal and crow in the middle of the afternoon. Luckily for myself, I am not a light sleeper. My father and one of my neighbors are, however, and they are often woken up by these feral roosters when it crows early in the morning. When doing homework in the afternoon, the roosters present a significant distraction to my work. Eliminating animals that only serve as a nuisance to our communities is something that many residents, at least where I come from, will support. It all starts with the small things, after all.

SB-2195-SD-2

Submitted on: 3/16/2022 10:18:23 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Marla Gardner	Individual	Oppose	Written Testimony Only

Comments:

I am against SB2195 SD2 to eradicate feral chickens in the Hawaiian islands. There is no efficient way to administer OvoControl that would protect the many other birds on our Islands. What about our waterways? Is it safe? Will it kill marine life?

OvoControl cannot be distributed in damp or rain, only a covered space on concrete for 30 consecutive days. It must be monitored and removed from the area after 2-3 hours of feeding. Care must be taken that Nene and other birds do not come in contact with OvoControl or any contaminated soil, bugs or water. The Department of Health is against this bill. They do not have the resources to maintain a program of this kind.

Locally organized chicken programs that could harvest and sell the eggs for consumption. There are so many companies that merchandise clothing, hats and other goods to commemorate Kauai Chickens.

SB-2195-SD-2

Submitted on: 3/16/2022 11:48:12 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Dana Keawe	Individual	Support	Written Testimony Only

Comments:

Support SB2195 SD2

SB-2195-SD-2

Submitted on: 3/16/2022 2:36:11 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Carole R. Richelieu	Individual	Support	Written Testimony Only

Comments:

As amended to a humane approach to wildlife management.

SB-2195-SD-2

Submitted on: 3/16/2022 4:19:55 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Susan Kitaoka	Individual	Support	Written Testimony Only

Comments:

Reference SB2195, I am in support of this proposal. We have been living through day and night with crowing feral chickens in our complex which have multiplied within the last five years plus. The noise, health issues, erosion on the hillside have become a major concern. The association board members have been notified at the monthly meetings of our concerns; however, nothing has been done to make any attempt to eradicate for the betterment of our community. I am hoping that this proposed SB2195 will assist us to move forward and remedy this issue. It is understood that eradication will be a work in progress but we need to stop the ongoing issues with these feral chickens before they multiply in numbers which is getting out of control.

Thank you,

Susan Kitaoka

SB-2195-SD-2

Submitted on: 3/16/2022 6:18:29 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Pat Flynn	Individual	Support	Written Testimony Only

Comments:

I support this bill.

Pat Flynn

Kailua Kona, HI

March 16, 2022

RE: SB2195

Aloha Senators of the Senate Committee on Ways and Means (WAM) who are hearing testimony for SB2195, Relating to Fowl. Specifically the Feral Rooster/Chicken populations in Aiea.

I am a resident of Aiea, and my family lives above the new Aiea Library, which is located at the Old Sugar Mill location. To say the least, the last few years has been a living nightmare due to the increasing feral rooster/chicken population in our neighborhood. This is a health issue, from all the droppings and fleas from the fowl; a safety concern for cars dodging the fowl as they are on our streets; and a physical, as well as emotional stress from all the crowing at all hours of the day and night!

This started becoming a major problem about 3+ years ago when the feral population became present in our neighborhood, and has subsequently increased. We were told that this began partially when an elderly neighbor was raising chickens in his garage, and many had escaped. The population established, and then exploded along the Aiea stream corridor (which was exasperated by people feeding, as they still are, along the stream), and from there the fowl began to spread to the C&C lot, then the Aiea Library, and then throughout the neighborhoods....

There have been several nests in our front and backyards, as well as our surrounding neighbors yards that we have had to remove; and the excrement is beyond describable! I have also personally seen some extreme safety issues with people walking along Hakina St. almost being hit from cars swerving to miss chickens on the road! Additionally, fleas have greatly increased in our domesticated dogs and cats from the increase in fowl.

Even more disturbing and disrupting is the content clucking of the chickens, and especially the crowing of the roosters at all hours of the day and night! As many of us are now working from home due to COVID 19, this is almost indescribable! The rooster crowing is not the Old McDonald Nursery rhyme; it is high pitch scream like yell at times at all different octaves and sound levels. At night we are constantly, awoken between 11pm-7am! We have even had to invest in double pane windows, and sleep sound machines so we could at least try and mitigate the sound levels of the crowing. The nightly/earlier morning crowing has also developed a hardship for my family. Our 12 year old son is a Type 1 Diabetic, and the constant interrupted sleep cycles from the roosters has negatively affected his blood sugar levels, as well as his schooling from being tired most mornings!

A year and a half ago we saw some relief from the sponsored pest control irradiation of the fowl, but when the funding ended, the fowl along with the associated negative aspects have exponentially increased. I urge you to pass this legislation in order to help to bring back our quiet fowl free community in Aiea

Mahalo for your consideration with this matter,



Dr. Andy Kaufman
99-380 Hakina St.
Aiea HI, 96701
808-349-2277

SB-2195-SD-2

Submitted on: 3/16/2022 7:41:13 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Anne Forshey	Individual	Support	Written Testimony Only

Comments:

Chair Rep. Hashem, Vice Chair, Rep. Perruso, and Members of the Committee,

Thank you for the opportunity to contribute my support for SB2195, SD2.

As a long-time Hawai'i resident, I concur with the legislature's findings that feral chickens and roosters are a nuisance. The establishment of a five-year feral chicken eradication pilot program to eradicate feral chickens in the State, if done humanely and consistent with expert guidance, appears to be a reasonable approach to resolving this issue. These are not native species and have little value to the human, plant, or animal populations across our islands.

The proposed partnership between the State Department of Agriculture and the United States Environmental Protection Agency for the use of OvoControl on feral chickens is a sensible, practical, and humane approach to wildlife management.

M. A. Forshey, Ewa Beach

SB-2195-SD-2

Submitted on: 3/16/2022 7:55:03 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Renee DiCesare	Individual	Oppose	Written Testimony Only

Comments:

Hawaii has a lot of natural beauty and is a place that people love to visit. The feral chickens are part of Hawaii's beauty. For chicken lovers like myself, those chickens are part of why we would want to visit Hawaii. To see Hawaii's chickens, would be very exciting, and I have heard from others that the chickens were one of their favorite parts of their visit. I have an indoor pet chicken who is of the same breed as the ferals in Hawaii, and I can tell you that she is one of the most sweet, intelligent, loving pets I've ever had. Hawaii's chickens were created by God, and they deserve to live the natural lives that God created for them, without human interference. You cannot just get rid of everything (or everyONE in this case) you perceive is a problem. You have to learn to coexist with God's creatures in peace and harmony, and you must show respect for God, the Creator, by respecting His creation. If you have ANY respect for God at all, you will leave the chickens alone and let them be. And if you don't respect God, at least show some respect for the people who enjoy seeing those beautiful chickens in their natural habitat, and for the birds themselves. They harm no one. They don't hunt other animals. And they don't destroy the land around them. They cause no harm at all. I know this for a fact. I've had pet chickens for 22 years. And as for the roosters? Thank God for the beautiful crowing they do as they sing praise to Him with their voices lifted. Try looking at the beauty in nature instead of finding fault in everything that doesn't suit your desires. Remember, you're not the only ones who share this planet. Thank you for your time.

SB-2195-SD-2

Submitted on: 3/17/2022 3:57:24 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Alex Delesky	Individual	Oppose	Written Testimony Only

Comments:

I am against this bill for serveral reasons. Other costly programs have been implemented in the past, at the tax payers expense, and have failed miserably. This too is an expensive proposal which has a low likelihood of success. There is no preventaive or in place for other wild birds or animals to eat the medicated feed. No studies have been done on the effects the feed could have on said wildlife and there is no guarantee the chickens will even find and eat the food. A lot of money is going to be wasted on this "project".

SB-2195-SD-2

Submitted on: 3/17/2022 4:02:26 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Marian Hussenbux	Individual	Support	Written Testimony Only

Comments:

As a result of advocacy for humane methods of bird control, including birth control, made by Hawai'ian Humane Society, we understand that this bill has been amended and now requires the state Department of Agriculture to submit a special local need registration to the United States Environmental Protection Agency for the use of OvoControl on feral chickens.

Animal Interfaith Alliance is very happy to join Hawai'ian Humane in supporting this ethical approach to wildlife management.

SB-2195-SD-2

Submitted on: 3/17/2022 4:28:08 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jennifer Chiwa	Individual	Support	Written Testimony Only

Comments:

Aloha Chairperson Hashem, Vice Chairperson Perruso and Committee Members.

I am Jennifer Chiwa, have lived on Oahu my whole life and currently reside in Makiki.

Please support SB 2195 SD 2 as this bill would provide a humane approach to management of the population of feral chickens.

Mahalo for this opportunity to testify and for your consideration.

SB-2195-SD-2

Submitted on: 3/17/2022 6:13:42 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Melanie Kim	Individual	Support	Written Testimony Only

Comments:

Please support this bill in finding humane ways of managing our feral chicken populaton.

SB-2195-SD-2

Submitted on: 3/17/2022 6:55:51 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Bill Dixon	Individual	Support	Written Testimony Only

Comments:

This legislation establishes a humane method to reduce the overpopulation of feral chickens.

The bill requires the state Department of Agriculture to submit a special local need registration to the U.S. Environmental Protection Agency for the use of the birth control product OvoControl on feral chickens.

I urge your support.

SB-2195-SD-2

Submitted on: 3/17/2022 7:22:57 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Sarah Haralam	Individual	Oppose	Written Testimony Only

Comments:

Hello to the Legislature of Hawaii, and thank you so much for taking the time to entertain my testimony today.

My name is Sarah Haralam, and I'm a Pennsylvania resident invested in the existence, management and welfare of Hawaii's wild chickens.

Briefly, chickens have an immense amount of value, from acting as a whimsical tourist attraction to making wonderful pets, for both companionship and a source of sustainable food.

However, recognizing the nuisance an overgrowth of this wild population may present to the residents of Hawaii, I oppose this bill for the following reasons:

The wild chickens of Hawaii are, in practice, no different than many other invasive or nuisance animal species on the mainland such as White-tailed Deer, feral cats, Gulls and other birds, etc. Each of these species have reached points of population overgrowth, and represent risks to human health, property and safety when their numbers proliferate; yet all are under broad and diverse management plans in numerous states without complete eradication being the goal.

Wildlife, animal and health managers are well aware of the risks and benefits each of these species present, and keenly recognize the fact that complete and SPECIFIC eradication of a species is a lofty goal, easily outlined in speech but poorly executed in practice.

The proposed method of eradication, OvoControl contraceptive feed, is very non-specific, particularly in such a widespread and transient population as Hawaii's wild chickens. Thus far, the bill does not seem to account for how the feed will target ONLY wild chickens, and evade consumption by other bird species deemed highly valuable, such as Hawaii's beloved Nene goose.

It seems in practice to be a low-effort, humane solution to gradually reduce population numbers, but the amount of human supervision the OvoControl method would require is burdensome- the feed would need to be constantly monitored to ensure only the target species would consume it, to say nothing of potential contamination to food and water sources used by other, high-value bird species.

Invasive populations have been well-managed by different methods in other states, and I wonder

if the Legislature has considered a different approach. For example, White-tailed Deer are well-managed by controlled and limited culls, even recognizing their huge responsibility for motor vehicle accidents, property and fauna damage, and disease reservoirs in numerous states. Feral cats present a massive nuisance to property owners, yet are humanely trapped, neutered, and released, with many being retained for adoption to loving owners; thus reducing the feral population.

Gulls, large groups of crows and other migratory birds frequently congregate in urban and suburban areas, leaving droppings and destroying plants. These birds are discouraged from congregation in these areas through humane methods such as loud “boom machines”, flashes of light, and sound recordings; all low-cost, low-effort, non-invasive methods that have proven successful many times over in numerous municipalities across the country.

I emphatically encourage the Legislature to consider the above-mentioned methods of population control, and to amend it’s goal from total eradication to *management* of Hawaii’s wild chickens. In many cases, these fowl have been adopted as pets to loving homes, and remain a whimsical and unique symbol of the Islands to folks across the country.

Please reconsider SB2195. There are better ways to achieve harmony for both humans and fowl.

SB-2195-SD-2

Submitted on: 3/17/2022 7:30:49 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Bunny Kong	Individual	Oppose	Written Testimony Only

Comments:

I am born and raised Kauai resident. **I firmly oppose this bill** for multiple reasons.

1. Protected birds (example: the Nene and the Red Junglefowl) could inadvertently eat the OvoControl bird seed and cause health concerns. Studies have shown that it can reduce a bird's ability to dissipate heat when temperatures and humidity are high causing sensitivity to heat stress and death.
2. Hawaii (especially on Kauai) is well known for their feral chickens. The rooster is used as a marketing icon for souvenirs. The locals and tourists enjoy seeing them around. Hawaii wouldn't be Hawaii without the chickens.
3. Feral chickens do not threaten, harm, or kill native birds. Other animals, such as (feral) cats, unleashed dogs, mongoose, rats, etc are few of the main culprits.
4. Hawaii leaders have been pushing their efforts to be more a self sustainable Hawaii. Feral chickens can produce eggs. Easily sustainable and with proper means, their eggs could be harvested for sale or consumption. Drugging them to destroy their eggs is counterproductive. Many local residents keep pet chickens for their eggs.
5. Feral chickens are great for landscaping. They control unwanted pests such as roaches, centipedes, and mosquitos. Their feces can be used as fertilizers to grow trees and flowers. They are self sufficient by grazing the land and foraging for food.
6. There are more efficient and eco-conscious options to consider to control the feral chicken population such as allocating funds to create chicken sanctuaries and harvesting their eggs for sale or consumption. Sales can be used to cover costs.
7. It takes one chicken to come into your life and change the way that you will forever look at chickens. As a Kauai resident, I also have beloved pet chickens and my flock wouldn't be here without the start of a feral hen and her chicks. There are many personal reasons why I love them and people may not understand unless they have taken the time and effort to raise their own as well. This leads me to my main concern that there are people out there who would take matters into their own hands, abuse this opportunity, and potentially harm my own flock. It will only cause more aggression and conflict.

SB-2195-SD-2

Submitted on: 3/17/2022 8:18:18 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Helene Navaro	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support this Bill with the amended version to control Feral Chickens Humanely through the use of Ovo birth control for birds. Ovo birth control was used successfully to control the over population of pigeons.

I humbly request your support for this bill with the use of Ovo birth control to control the feral chickens we have throughout all the islands.

Mahalo Nui Loa!

SB-2195-SD-2

Submitted on: 3/17/2022 8:36:53 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Myra Hammonds	Individual	Support	Written Testimony Only

Comments:

Aloha,

I support humane control for our bird population.

Mahalo for your time. I really appreciate your time.

Sincerely,

Myra Gale Hammonds

SB-2195-SD-2

Submitted on: 3/17/2022 9:11:14 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Natalie Graham-Wood	Individual	Support	Written Testimony Only

Comments:

I support this more humane SB2195.

SB-2195-SD-2

Submitted on: 3/17/2022 10:23:55 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
DEAN BRANDT	Individual	Oppose	Written Testimony Only

Comments:

In regards to SB2195:

Honolulu County did (does?) have a feral chicken trapping and euthanasia program where they paid contractors an absurd cost per bird to trap and gas them to death. It was proven completely ineffective and another waste of money by the local governments.

This bill is in fact a bill that supersedes the failed bird eradication bill HB 1095 (?) that in itself wasted taxpayers money to initiate and assemble. The reality is these anti chicken bills are supported by a minority of residents, the few who feel they are entitled a life in shangri-la, where only the sounds of gentle waves on the shores exist.

There is a large population of resident who actually care for these animals, who treat the injured birds, rescue the babies left to try to fend for themselves after their parents are killed or destroyed by cars, dogs, etc. These residents certainly do not represent the minority who support this bill.

Much like the Oahu resident who took it upon herself to kill a Peacock with a golf club due to her need for “peace and quiet”, her killing a beautiful animal indiscriminately cannot be seen as taking the moral high ground. This resident was found guilty of animal cruelty, so how does this bill differ?

Man’s attempts to alter Hawaii’s nature has always resulted in failure. The list is long of the the negatives the fauna and flora have suffered due to misguided governmental attempts to please the few or to please specialty groups.

If the amount of resources used to introduce these two recent bills (and the additional \$500 fine “anti feeding” bill) were used to implement real change to end illicit gambling and animal cruelty in Hawai’i, Cockfighting, we as residents would all be better off for it, and then for sure the counties would see an actual reduction in feral (dumped) chicken populations.

The Hawaii Humane Society and Animal control divisions cannot even keep up with the dog and cat population they are tasked to help control. How is this program going to be properly administered? Most likely in the way we have all become accustomed to here in Hawaii, by the

awarding of contracts "to study the matter", to hire "contacted specialists", to setup an absurd budget then to completely fail in the actual performance of the contract terms.

Chickens like all living beings just want to live, thus I oppose SB2195 in full.

SB-2195-SD-2

Submitted on: 3/17/2022 11:45:01 AM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Cara Oba	Individual	Support	Written Testimony Only

Comments:

Hi, as a resident of Hawaii Kai, I can attest to the fact that the feral chicken population is becoming an ever increasing problem. It's also noticeable around the island. We attempt to chase them away but they keep on returning (we've had a brief respite but a new chicken family has just moved in). The crowing is a constant nuisance when a rooster moves in (early mornings and throughout the day disrupting work/school Zoom calls) and we regularly clean up after them (poop and digging up landscaping) as they also come through the neighborhood regularly. I am concerned about vectors of disease and parasites (bird mites!). Our neighborhood has sent out messaging to discourage the feeding the chickens but it's not any kind of solution. I'm totally for folks owning chickens and managed populations. This is just out of control and on a concerning trajectory. I really appreciate exploring what humane control options there are and would also encourage looking into what caused the population explosion so that we can prevent future issues as well. Thank you!

SB-2195-SD-2

Submitted on: 3/17/2022 3:37:17 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Jocelyn Evans	Individual	Oppose	Written Testimony Only

Comments:

As a chicken owner I was quite shocked when I heard about this bill being introduced, but I wanted to make sure I did my due diligence and research before I came to any conclusion. After doing research on the pros and cons of this bill, I must say I strongly oppose what is being suggested when it comes to eradicating the wild chicken population of Hawaii. They have many benefits and play a big role in the culture. I know there are concerns for the environment and how the chickens can affect it. I saw a big concern was the chicken poop. Chicken poop can actually help enrich the soil, bringing in lots of nutrients like nitrogen, phosphorus and potassium that are known to help plant life thrive. They are also known to help keep down the centipede population, which are known to inflict painful stings. I think the overall worrying about the environmental effect is completely understandable and a very reasonable concern but it seems very counterproductive to put seeds into the ecosystem to kill these chickens off. You would be putting other wildlife, especially native birds, at risk. It would be more humane to allow the chickens to stay and find better ways to control the population. I know that cracking down on cock fighting would be a huge help. Hold the people who are fighting and dumping birds accountable. You could put programs in place to use the wild chickens as a viable food source as well, which in turn would not only help with the population but also lessen the strain on commercial chicken breeds to be manufactured. Their eggs are also edible and would be much better mass produced eggs. This would open up job opportunities in communities and be a source for steady income/revenue! These chickens have so much potential to bring more good to Hawaii than bad. Killing them all off is a waste of life and a missed opportunity to make a positive change in these communities. Please rethink this bill and look into other manners of population control that are more sustainable!

SB-2195-SD-2

Submitted on: 3/17/2022 4:33:28 PM

Testimony for AGR on 3/18/2022 9:00:00 AM

Submitted By	Organization	Testifier Position	Testify
Monique Parrish	Individual	Oppose	Written Testimony Only

Comments:

When we talk about eradication and not population control, we are not addressing the root of the problem but trying to find an “easy” out, which by the way, is never easy or cost efficient. There is also concern over how they are going to this: Ovocontrol. (Please Research the warnings and dangers of this product)

Proof a problem can be removed and not come back:

I am proof that when you have a large problematic population on the property, there are other answers. I captured all 67. Housed some, found homes for others, and handed some to pest control. But 7 years later, there hasn’t been another instance on this property that needed addressing. A couple of stragglers came through, but I was vigilant in making them leave. So, if places have a population problem it would be beneficial to be able to have someone to call for capture and relocation. If it’s a business that doesn’t want them there, they could call for capture and then take some responsibility by posting “no feeding” signs. Chickens are food motivated. (That’s just one example)

This experience has led me to believe that they can also be removed from sensitive native species areas.

Possible Solutions:

Sanctuaries:

Funds should be allocated to rehabs and sanctuaries. Sanctuaries can supply eggs to the needy. How can we talk about people, hard working people here in Hawaii going hungry in the same breath as eradicating something that can provide food?

There are people here with the knowledge and expertise and willingness to devote themselves to operating such sanctuaries. The Junglefowl DNA would be saved! (Please research)

The sanctuaries can also provide education on importance and history of the junglefowl and also how to properly protect your property from an unwanted population. (Example; cover and secure composting and trash. For bird lovers, fill your bird feeders when you are there to enjoy the birds and don't leave the feed unattended etc) And also teach people to become

Responsible chicken owners: for example,

I personally believe in responsible chicken owning. A lot of these mistaken "ferals" are actually someone's pet. If you are an owner to a beautiful flock. Be mindful of your neighbors. While free-ranging is wonderful for the flock, we shouldn't allow them to go onto other peoples properties and be a nuisance. Don't give those who don't appreciate the chickens a reason to complain and agree with eradicating! If we want to keep them safe, we have to be responsible.

Leg Banding, perhaps:

If leg banding for pet chickens are put in place, then neighbors will have a civil suit recourse for any damage done to their property. There would be no need for the punishment of all because of some. Further, banding with a database, would allow us to be able to determine what really is a pet problem and what is a feral problem.

Cockfighting: the biggest issue! These breeders have no use for many hens. Hens are released/dumped into the wild. These breeders would NOT like or adhere to a banding system, so set up an anonymous hotline where people can report unband chicken keeping. 1st step citation with fine per chicken (and make sure they pay!) Next step, remove all chickens.

In closing: Instead of turning a blind eye, I believe that the crackdown of illegal cockfighting and breeding for this purpose would reduce the feral population. Yes it's a BIG illegal business almost mafia-like! So are we so afraid that we're willing to just eradicate? And take the risk of using poison or OVOcontrol to protect native species, but may also hurt them? If you don't get to the root of the problem the branches will sprout new leaves eventually.

Everyone has a part to play and eradication is not the answer.