



wild news

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Taking the Bait A World Without Raptors...

by Leigh Bittner



Barn owls eat many types of rodents; primarily gophers and voles in Southern California (photo: barnowlboxes.com)



- Poison bait
- Burrowing Owl pellet
- Burrowing Owl "whitewash"

Burrowing Owl

This photo was taken at an active Burrowing Owl burrow at a new vineyard in Ramona, California. This vineyard also has Barn Owl boxes, so the owner is attracting owls, then threatening them by poisoning rodents.

In the amazing book *Silent Spring*, Rachel Carson imagines a "silent" springtime; one in which the birds and bees don't arrive...because of our environment laced with pesticides DDT and DDE. The imaginary journal entries on Page 2 are my homage to her work that changed America. Today, environmental intelligence and science-based warnings are coming from

author Ted Williams, a frequent contributor to *Audubon Magazine* and author of *Wild Moments*. In the Jan-Feb 2013 issue of *Audubon*, Mr. Williams has written a comprehensive article entitled: "Building a Better Mousetrap". You can read the entire article at the Audubon website. Furthermore, I encourage you read or re-read *Silent Spring*, Rachel Carson's warnings of overuse of pesticides, and now rodenticides (rodent poisons), that are still harming our water, our soil, our health, our wildlife, our children, and our DNA in ways we know and in

(cont'd on page 2)

(from page 1)

ways don't know or can't know until it is too late.

DDT

We have stopped adding new DDT, an agricultural pesticide, to our environment since it was banned in 1972 after being classified a possible carcinogen and human toxin. This chemical's metabolized version, DDE, was the culprit in the decline of our Bald Eagles and Peregrine Falcons (among others) Eggshell thinning caused by DDT

poisoning of these and many other birds almost brought about their extinction. During and after WWII there was massive dumping of DDT into the Pacific Ocean. The residual effects still exist today. Researchers with the Ventana Wildlife Society's California condor recovery program have established a strong link between DDT and eggshell thinning in areas where sea lion carcasses are a food source. **Source:** http://ventanaws.org/condors_DDT/

Serial Killer: Brodifacoum (AKA d-Con)

Raptor persecution is real. It is happening right now, right here, every day, in every city in America, and all over the planet. We are killing off the wildlife that is our natural rodent control. Many of us don't even realize that poisoned rodents are a poison-carrying vector to the raptors and wildlife that eat them.

The links are simple: Raptors eat our rodents, we poison our rodents, raptors eat the poisoned rodents and die. Bobcats, coyotes, and dogs also eat the poisoned rodents and die. Rodents develop tolerance to the

Gardener's Journal

March 2014

Finally, we have eliminated all those pesky ground squirrels! I don't have to plant my trees in wire baskets anymore because we finally killed off all those varmints, rats, mice, squirrels, and gophers! The Warfarin rodenticide I bought has finally cleaned up my orchard, backyard and nothing is chewing on my new vineyard.

April 2014

The ground squirrels are back! And the gophers...I keep putting out more poison pellets, but they don't die from it...are they developing immunity? I guess I'll order that new one poison I found online that is going to be illegal soon. I can't let the gophers eat my new grape vines, or my tomatoes. I don't have time to manage regular traps, I need stronger poison. My neighbor recommended I use Hot Shot and d-Con with Brodifacoum. (It must be safe or the garden center wouldn't sell it!) That should work, because the Warfarin isn't working anymore. I heard the rodents can get resistant to Warfarin and they learn to avoid poisons they have experienced before.

May 2014

We used to have a really neat Red-tailed hawk's nest in our backyard...haven't seen them this year. Haven't seen the Golden Eagle this year either...hmmm...I guess they moved on. Has anyone seen the barn cat?

January 2015

They're back, all of them...some vineyards and gardeners swear by their Barn Owl boxes and electric traps, perhaps I'll try Barn Owl boxes...but that can't solve the problem 100%...I want 100%. So I'll put out more d-Con also.

March 2015

There aren't any Barn Owls...I know they were here, where are the Red-tails? The Golden Eagles...I saw them eat the dead gophers I threw over the fence, should help them fatten up. And that Bobcat sure loved the pile of dead rodents I left. My pet Golden Retriever died last week...bled from his nose and mouth. Took him to the Vet, but it was too late...

poisons and learn to avoid them, encouraging us to use even higher doses. Meanwhile, we have weakened and diminished our raptor populations and we still have the rodent problem.

Ted Williams in the Audubon article explains it very well: "Our raptors are victims of second-generation anticoagulant rodenticides used by exterminators, farmers, and homeowners. They're found in such brand names as d-Con, Hot Shot, Generation, Talon, and Havoc, and they sell briskly because of our consuming hatred of rats and mice. The most pestiferous species are alien to the New World and therefore displace native wildlife; they contaminate our food and spread disease. We also hate them for their beady eyes, their naked tails, and their vile depictions in literature. So the general attitude among the public is, if a little poison is good, a lot is better. But even a little second-generation rodenticide kills non-target wildlife.

Both first- and second-generation rodenticides prevent blood from clotting by inhibiting vitamin K, though the second generation products build to higher concentrations in rodents and are therefore more lethal to anything that eats them. The second generation product was



developed by Imperial Chemical Industries of London at the request of the World Health Organization, because rats appeared to be developing tolerance to warfarin, a first-generation rodenticide.

What makes second-generation rodenticides so non-selective? They kill slowly, so rodents keep eating them long after they've ingested a lethal dose. By the time the rodents expire, they contain many times the lethal dose and are therefore deadly to predators, scavengers, and pets."

Secondary poisoning from these second-generation anti-coagulants is real and the damage to our wildlife is occurring silently. Because these products are readily available the general public assumes they must be safe to use. Unfortunately, by the time the science and political will catches up with poison manufacturing, we have poisoned our environment, our natural rodent predators, and ultimately ourselves.

Second generation rodenticides provide a very slow death for rodents, usually taking several days after ingestion to actually kill. During those several days the rodent will still go out to find food and water. They will be sluggish and debilitated, and as a result, will be the first to be caught. Owls, hawks, eagles, falcons, bobcats, coyotes, raccoons, mountain lions, foxes, herons, egrets, domestic dogs and cats, and even children can be at risk.

History of Rodenticides

Beginning in the 1940s, warfarin and dicoumarin, both anticoagulants were used worldwide for rodent control. (Yes, warfarin is the blood thinner used for some human pathology). Records show warfarin grain baits were successfully used in California for ground squirrels by 1953. These so-called first generation anticoagulants appeared to have a lower risk for non-target animals because of the half life for these compounds.

For example, the half-life for warfarin ranges from 5-28 hours. Whereas the second generation rodenticides, such as the toxic killer Brodifacoum, build up in the rodents to a higher level and become extremely toxic, with a more dangerous dose of the chemical lasting for almost a month.

A mere six years later, by 1960, resistance to warfarin was reported in the US and UK, and hence the develop-

ment of the more acutely toxic second generation anti-coagulant compounds. And that has landed us where we are now.

The EPA and the California Department of Pesticide Regulation both realize the problem, but apparently their lawyers aren't as good as those at Reckitt Benckiser, producer of Woolite, Lysol, French's Mustard, and brodifacoum laced de-Con, or the Spectrum Group that make Hot Shot, whose active ingredient is brodifacoum.

The EPA has declared second-generation rodenticides too dangerous for public and household use and those products are supposed to be off the general market. We find they are still widely available due to huge inventories, and a recent court decision has allowed three of the largest manufacturers to defy the order with a technicality. This is a deadly loophole, one that kills wildlife and destroys ecosystem balance but protects industry profits.

Using legal tactics to delay the EPA's ban of its products, Reckitt Benckiser LLC, the manufacturer of d-Con products, continues to sell 12 of its toxic products to retailers in the United States. You can still find these products at Walmart, Target, Home Depot, Lowes, ACE Hardware, Giant Foods, True Value and most garden centers.

Symptoms of Poisoning in Pets or Wildlife

You might not even know what is making your pet weak or ill unless you realize what has happened; or why that hawk is acting "tame" and coming to a water source. Therefore, if you or your neighbors use rodenticides and you have pets and love wildlife, you need to be vigilant.

Common poisoning symptoms to watch for:

- Coughing
- Difficulty breathing
- Weakness
- Pale or bleeding gums
- Collapse
- Vomiting
- Diarrhea (with or without blood)
- Nose bleeds
- Bloody urine, increased urine
- Swollen joints
- Wounds that keep bleeding
- Hematomas
- Gastrointestinal problems
- Ataxia (drunken walk)
- Abnormal eye movements
- Thirst, increased water intake

"We live in an era dominated by industry, in which the right to make a dollar at whatever cost is seldom challenged."
—Rachel Carson

The Statistics

- Professor Maureen Murray of the Tufts Cummings School of Veterinary Medicine in Massachusetts is studying these poisonings and is conducting necropsies on many raptors and owls. In 2011, she found **rodenticides in 86% of the raptor livers** she examined.
- In 2012, of the raptors (owls, hawks etc) and other rodent consuming wildlife that were tested by the local wildlife hospital, WildCare, in San Rafael, California, **79.1% were found positive for secondary rodenticide poisoning.**
- In an EPA study from 1999-2003, more than 25,000 children under age six ingested enough rodenticide to suffer poisoning symptoms.
- The most recent data from the 2011 Annual Report of the American Association on Poison Control Centers' National Poison Data System indicates that **nearly 85% of the reported poison exposures to rodenticides were from children 5 or under.**
- A scientific peer-reviewed paper published at UC Davis, "Exposure of Non-target Wildlife to Anticoagulant Rodenticides in California", by Robert Hosea, California Department of Fish and Game Pesticide Investigations Unit, non-target wildlife poisoning of birds and mammals showed a high frequency of exposure to brodifacoum.
- Tissues from 74 animals were analyzed, representing 21 different species. **70% of the mammals and 68% of the birds examined had rodenticide poisoning.** The two mammals most frequently exposed were Coyotes and Bobcats. The two birds most frequently exposed were the Golden Eagles and Barn Owls.
- In California, rodenticides showed up in 79% of fishers, 78% of mountain lions, 84% of San Joaquin Kit Foxes, **and in San Diego County, 92% of our raptors.**
- Since 1994, CDFW's Wildlife Investigation Laboratory has confirmed at least **300 cases of wildlife poisoning from anticoagulant rodent baits. Brodifacoum was the poison most frequently detected.**

Recently, the mate of the famous New York City red-tailed hawk, Pale Male, was confirmed to have died from ingesting a poisoned rat.

Animals harmed include Coyote, Gray Fox, San Joaquin Kit Fox, Raccoon, Fox Squirrel, Bobcat, Red Fox, Mountain Lion, Black Bear, Hermann's Kangaroo Rat, Bald Eagle, Golden Eagle, Canada Goose, Great-Horned Owl, Barn Owl, Red-Shouldered Hawk, Red-Tailed Hawk, Cooper's Hawk, Turkey Vulture and Wild Turkey.

- **In 2008, the EPA declared that second-generation rodenticides brodifacoum, bromadiolone, difethialone, and difenacoum posed an "unreasonable risk" to children, pets, and wildlife.** Manufacturers of these poisons were given three years to stop selling directly to residential consumers. However a large loophole exists since large quantity sales were exempted, presumably to farmers and tamper proof bait boxes used by exterminators. Predators, scavengers, and pets are no less poisoned if they eat rodents that consume bait from sealed boxes or bait set out by farmers and vintners.
- In April 2014, The San Francisco Examiner reported that caretakers of a regional greenbelt near Cupertino, California in the San Francisco Bay area, learned of a problem with predators eating poisoned rodents after observing a mysterious outbreak of severe mange among bobcats. **12 dead bobcats were found and there have been numerous reports of sick and dying bobcats that are believed to have eaten rodents that ingested second-generation rodenticides.**

According to biologist Cindy Roessler there is a **clear link between the poisons and cases of**



severe mange in bobcats. The rodenticides weaken the bobcat immune systems until they can no longer suppress the mites that cause mange.

As the bobcats become weaker, they lose the ability to hunt and die slow, painful deaths.

RAMONA'S BACKYARD BIRDS

Not many places in California can boast having Golden Eagles in their backyards. But happily, we still have these wonderful raptors in portions of San Diego's east county.

Golden Eagles historically were all over San Diego County, even on the cliffs of La Jolla. Now, their remaining territories are all east of the I-15. At WRI our number one goal is to protect our precious remaining Golden Eagle territories. With your support, WRI has established an Eagle Fund at The San Diego Foundation, an endowment that has this same goal as its mission.



Support for this eagle research can be donated directly to WRI or through The San Diego Foundation (TSDF) where our Eagle Fund endowment is invested and managed. You can call TSDF at (619) 235-2300 or visit <http://www.sdfoundation.org/> to participate.

The following are remote camera photographs from a Ramona "Backyard". Enjoy!



Two Golden Eagles have been spotted by a local Ramona couple in their own backyard. These eagles have been attracted by a small water bowl on the couple's property. WRI biologists began tracking these eagles with orange patagial (wing) identification tags and VHF transmitters in 2006 and 2007. Both were hatched from different nests in San Diego County. They have been at this site for two years now.



Patagial tags are a great way for biologists to identify an individual, but after eight years of sun and weather can make the tags difficult to read. WRI biologists examine thousands of photographs for the perfect angle to tell who they are looking at. These birds are now a pair in Ramona. They were hatched in San Diego County and have returned as 7- and 8-year-old adults to breed.



WRI biologists evaluate crop size to see if the eagles are finding enough prey. The eagles return daily to this small bowl of water for a drink and they even attempt to bathe.



Eagles aren't the only wildlife that appreciate a safe place to drink. Bobcats, coyotes, raccoons and this grey fox have been seen at this same watering hole.

The **Amazing Bird Diversity** in and around the **Ramona Grasslands**

Photos by Featured Member
Iris Kilpatrick

WRI Member Iris Kilpatrick is not only a talented nature photographer, she has also generously shared some of her phenomenal shots she took at the Ramona Grasslands and nearby environs — giving all of us a chance to appreciate some of the bird diversity that calls this ecosystem home. How many can you name? Answers at the bottom of Page 8, upside down of course!



#1



#2



#3



#4



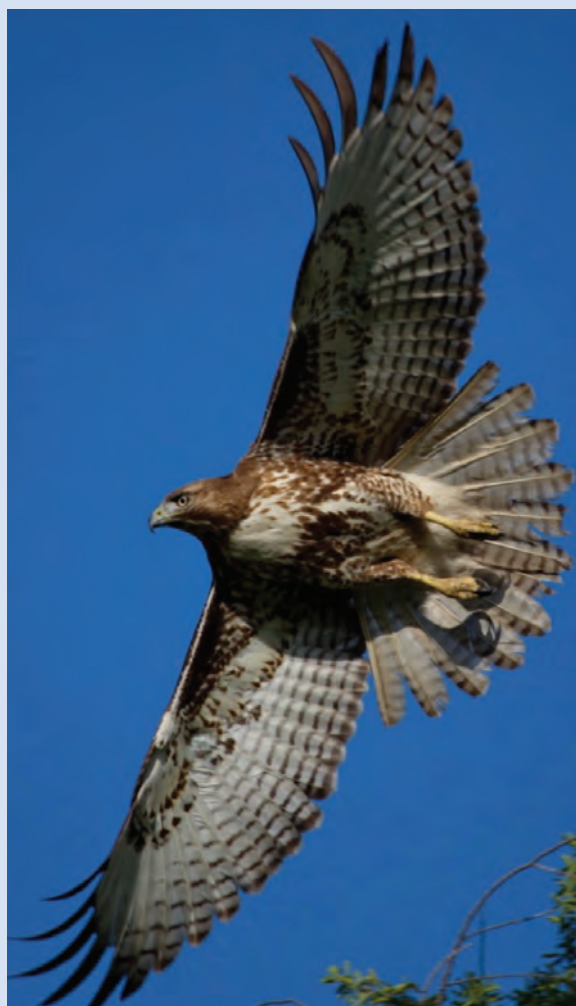
#5



#6



#8



#7

photos by Iris Kilpatrick



#9



#11

The Amazing Bird Diversity in and around the Ramona Grasslands

photos by Iris Kilpatrick



#10



#12

ANSWERS: #1 Meadowlark #2 Common Yellowthroat Warbler #3 Yellow-rumped Warbler #4 Black-throated Gray Warbler #5 Yellow Warbler #6 Mountain Bluebird #7 Juvenile Red-tailed Hawk #8 Hermit Warbler #9 American Kestrels #10 Bald Eagle #11 Zone-tailed Hawk #12 Raven & Bald Eagle with waterfowl

For those in agriculture, viniculture, and personal gardening, the question is:

How do we get back in a better balance with nature and still keep our rodent problem at bay?

The answer is old-fashioned common sense, hard work, mousetraps, barn owl boxes, and rodent traps... and a little bit of patience to encourage natural pest control.

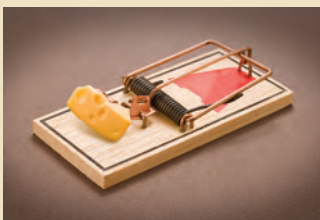
Learn how to safely handle rodent problems and more at these websites:

- www.raptorsarethesolution.org “RATS” Raptors Are The Solution website run by the San Francisco Department of the Environment
- www.hungryowl.org The Hungry Owl Project
- www.beyondpesticides.org
- www.barnowlboxes.com San Diego County-based business
- www.ruggedranch.net San Diego County-based business
- **Fresh Cab Botanical Rodent Repellent** (available at many websites)

Better Ways to Control Rodents...



(photo: barnowlboxes.com)



Standard Mouse Trap



Squirrelinator Trap



www.ruggedranch.net

SOME GOOD NEWS!

Good Housekeeping has removed their Seal of Approval from D-Con products. Please thank them on their Facebook page: <http://www.facebook.com/GOODHOUSEKEEPING>

Walgreens has taken these poisons off their shelves. Thank you, Walgreens!!

The **Poway, CA Home Depot** has voluntarily removed d-Con with brodifacoum off their shelves. Please thank them when shopping there.

UPDATES:

July 2013

California Department of Pesticide Regulation (CA DPR) has designated second-generation anti-coagulant rodenticides (SGAR) as California-restricted materials. This decision to restrict the use of SGARs is to address the statewide problem of wildlife poisoning from these products. This move came after a 10 year evaluation of SGARs and the 2008 action from the U.S. EPA to prohibit all consumer-size SGAR products and require secure bait stations to be used for all outdoor above ground uses.

May 2014

Washington, DC – With the announcement that the production of deadly rodent baits will stop by year's end, Beyond Pesticides, a national public health and environmental group is renewing its request of the nation's retailers to immediately stop the sale of d-CON® anticoagulant rodent bait products, citing the poisoning of children, pets, and wildlife. This call comes as the manufacturer of d-CON®, Reckitt Benckiser LLC, announced an agreement with the U.S. Environmental Protection Agency (EPA) in which it will cease production, but not sale, of the product by the end of 2014.

“It is outrageous that a highly toxic product associated with the poisoning of children, pets, and wildlife remains on the market one more day, let alone for the years it will take to exhaust supplies,” said Jay Feldman, executive director of Beyond Pesticides.

HOW YOU CAN HELP

- Let Walmart, Home Depot, Lowes and garden centers know how you feel about them selling second-generation poisons such as the brodificoum laced products such as d-CON®. (The Poway, CA Home Depot has voluntarily removed d-CON with brodificoum off their shelves.)
- Support wineries that don't poison recklessly: Ask them if they are wildlife friendly in their rodent control protocols.
- Use mousetraps, electric traps, or traps that let you eradicate without poisons such as Rat Zapper.
- Remove piles of yard debris, trash, and construction waste where rodents make homes.
- Eliminate food sources. Don't leave pet food outside.
- Remove fallen fruit from fruit trees in your yard.
- Exclude rodents from your home. They can squeeze through tiny holes: ¼ inch for mice and ½ inch for rats. Go around your garage and home and seal openings with metal, mortar, concrete, or copper mesh wool.
- If you use a professional pest control company, tell them NOT to use brodifocoum or any second-generation poison.
- Trap rodents and they can be "dispatched" without the use of poisons.



“Not only are these alternatives safer for people, pets, and wildlife, they are, in the long run, more effective because they don't take out the mammals and birds that keep rodents in check.

With second-generation poisons you'll get a spectacular initial kill. But a year or two later, rodents will come storming back and you'll be fighting a war without allies.”

Ted Williams

Building a Better Mousetrap

The Sustainable Wine Growing Movement is Growing



The Sustainable Winegrowing Program (SWP) has its roots in Northern and Central California wine regions and needs to spread to San Diego County.

The SWP was initiated in 2001 by members of Wine Institute and the California Association of Winegrape Growers (CAWG) to promote vineyard and winery practices that are sensitive to the environment, responsive to the needs and interests of society-at-large, and economically feasible to implement and maintain.

Ask your vintner if they are part of the solution by joining the California Sustainable Winegrowers Alliance.

Eco-friendly Model Our Local Wineries can Adopt

Spring Mountain Vineyard has been a sustainable wine estate since 1992. The goal of sustainability is to avoid depleting the long-term health of the land and environment for short-term gain. It requires ingenuity, dedication and the curiosity to find alternate solutions to the ongoing issues of farming a challenging and diverse wine estate like Spring Mountain Vineyard. They have learned that it is indeed possible, as well as economically feasible.



Sustainable winegrowing has been a matter of course at Spring Mountain Vineyard from day one, not something adopted

because it became fashionable to do so. From the beginning, responsible stewardship has been a primary goal in their vineyards.

Spring Mountain Vineyard is an 845 acre footprint with 225 acres of vineyard located near forests, streams and a diverse and thriving animal habitat. Its steep elevations and varied terrain present challenges that have been met using a variety of sustainable methods that not only preserve the land and the eco-system, but enhance vine health and wine quality.

The most common sustainable winegrowing practices include avoiding poisons and embracing natural, biologically-based regimens.



A real threat to vineyards is from an insect called the Blue-Green Sharpshooter. This is an insect with piercing, sucking mouthparts that easily spread a bacteria and causes a deadly grape blight called Pierce's Disease. Bluebirds consume the Blue-Green Sharpshooter. Since 1996, Napa Valley's Spring Mountain Vineyard has installed 1,000 bluebird nest boxes and has watched the vine-

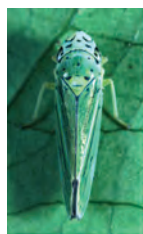
yard's once aggressive Pierce's Disease disappear. Another successful sustainable practice is used in the Spring, when a peaceful flock of sheep grazes on grasses between the vine rows. Their industrious work means no herbicides or machine intervention is needed.

CONCLUSION

Knowledge is power, and I truly believe that most people using these second-generation poisons do not realize how harmful they are. So it is all of our jobs to keep educated and demand our land users not kill wildlife and poison our community. I may own some land, but I don't own the right to randomly poison wildlife and the environment.

There is no better way to end this article than with another quote from Rachel Carson's revolutionary book, *Silent Spring*. Speaking of poisons, she writes:

"As crude a weapon as the cave man's club, the chemical barrage has been hurled against the fabric of life—a fabric on the one hand delicate and destructible, on the other miraculously tough and resilient, and capable of striking back in unexpected ways. These extraordinary capacities of life have been ignored by the practitioners of chemical control...who have no humility before the vast forces with which they tamper."



The Blue-Green Sharpshooter

GOOD NEWS

Related Issue on Chemicals in Our Food Chain

FDA Moves to Limit Some Antibiotic Uses in Livestock

(Beyond Pesticides, December 16, 2013) A new rule published by the Food and Drug (FDA) will limit the ability for food producers to give livestock antibiotics for subtherapeutic purposes. These new regulations come after decades of pressure from environmental and public health groups to limit the non-therapeutic use of these drugs in animal production. Though these regulations are an important step in the right directions, some are critical that loopholes still exist which could make these new rules less effective than they need to be.



photo: oceanworld.tamu.edu

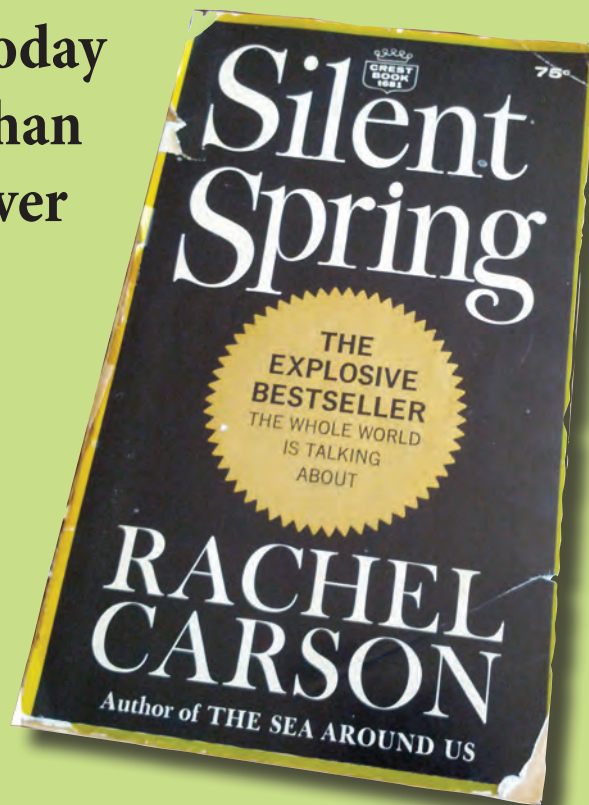


The FDA's new rules on antibiotics ask drug manufactures to change the label of antibiotic drugs so that farmers

will no longer be able to use them to promote the growth of livestock.

Currently subtherapeutic doses of penicillin and tetracycline are typically added directly into animal feed and water. The new rule also requires that licensed veterinarians supervise the use of antibiotics, meaning farmers and ranchers would have to obtain prescriptions to use the drugs for their animals. At present, farmers can go to feed stores and buy antibiotics over the counter with no regulatory oversight.

Making a Statement Since 1962 — More Valid Today Than Ever



It's rare for a single book to change history, but Rachel Carson's *Silent Spring* did exactly that. Following its publication in 1962, our government was moved to ban DDT as the book drove critical changes in the laws that affect our air, land, and water.

In 2006, *Silent Spring* was named one of the 25 greatest science books of all time by the editors of *Discover Magazine*. It is still in print, still valid.



A special thanks to our friends at JPI Printing

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