

The Voice of Outdoor Kansas

March-April 2016

P.O. Box 771282 Wichita, KS 67277-1282

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KWF Honors 2015 Conservation Achievement Program Winners

On Saturday, February 27, the Kansas Wildlife Federation honored 9 individuals and organizations for their conservation efforts in 2015 at the Conservation Achievement Program (CAP) Awards banquet in Wichita. The guest speaker at the banquet was Mr. Collin O'Mara, President and CEO of the National Wildlife Federation.

Pictured are (front row, 1 to r): Rue Armstrong from Topeka, Conservation Organization; Dave Foster from Dodge City, Outdoor Skills Instructor; Susan Metzger from Manhattan, Water Conservationist; Denise Scribner from Wichita, Conservation Educator; and Thad Rhodes from Wamego, Forest Conservationist

Back row, 1 to r: Stuart Scott from Wichita, Conservation Organization; Bill Horvath from Leavenworth, Conservation Organization; Kenneth Kieser from Lake Waukomis, MO, Conservation Communicator; Lane Letourneau from Topeka, Water Conservationist; Earl Lewis from Topeka, Water Conservationist; Troy Schroeder from Albert, President's Award recipient; and Senator Terry Bruce from Hutchinson, Conservation Legislator.

Not pictured is Gail Fuller from Emporia, the Land and Soil Conservationist, who could not attend the banquet.

Photo taken by David Zumbaugh, KWF Administrative VP from Shawnee.

Protecting the Land...
Passing on Our Traditions



KANSAS WILDLIFE FEDERATION

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President's Message

There is an old proverb that states, "The best time to plant a tree is twenty years ago. The second best time is now." The Kansas Wildlife Federation was humbled and made proud to be a fellow Kansan with the outstanding group of conservationists that were honored at the 65th Annual Meeting and the 52nd CAP Awards Banquet last weekend in Wichita. For this year's award recipients, it was plainly evident that for all of them, it is never too late to do what should have been done. Please check out, in this newsletter, their stories as to how these people are using their talents to promote wise-use and improvement of our Kansas habitat and natural resources. If you see them on the street, make sure to join us in a big 'thank you' for all they have done.

In the January/February edition of the newsletter, I mentioned how excited I was to have NWF's CEO & President, Collin O'Mara, as our banquet speaker. Once again, his message, words and enthusiasm were captivating, motivating, and eager to listen and learn more from this great leader. We thank him dearly for his visit to the land of sunflowers, bison, and honeybees.

On the first day of the Annual Meeting, the membership received Kansas legislative updates from Chris Tymeson with the Kansas Department of Wildlife, Parks and Tourism (KDWPT). Of the 23 plus bills by both the Kansas House & the Senate that garnered their attention, two of them especially caught our attention too: Senate Bill 384 and Senate Bill 425.

Senate Bill 384's short title is "Amending provisions of the nongame and endangered conservation species act." This bill will make it about impossible for the KDWPT to work to protect species and their critical habitat that are listed, or even include species that need to be listed. It will apply restrictions in that proper action cannot be taken on threatened and endangered species. It is very difficult to manage a species if one does not have the tools necessary to do the job. The bill adds a lengthy list of provisions that the Endangered Species Act "shall not apply to". In the end, the Act would only have authority over the "intentional" taking of a threatened or endangered species. The word "intentional" alone leaves a lot to interpretation. This bill is a dismantling of the non-game and



endangered species conservation act. Since the Kansas Wildlife Federation was instrumental in getting the Kansas Nongame and Endangered Species Conservation Act of 1975 implemented, we adamantly oppose Senate Bill 384. If Kansans want to invite the federal government to come into Kansas and implement regulations, then removing the ability for KDWPT to do their job is a sure way to make it happen.

Senate Bill 425 transfers authority to regulate conservation easements from the State of Kansas to county commissions. SB 425 threatens a landowner's ability to exercise private property rights and estate planning control and management of private lands for all future generations. As well, SB 425 affects the decision that was made by all of the Kansas congressional delegation supporting tax benefits for conservation easement donations. If SB 425 is enacted into law, Ft. Riley will not be able to protect the boundaries of the fort to be protected from encroachment. This could easily result in the Big Red One being moved to Ft. Hood in Killeen, TX.

Both bills were scheduled for a hearing on March 2nd at the capitol. You can contact your Senator and Representative and let them know how you feel about these two onerous bills.

In this newsletter, you will also see that we have two great new volunteer additions to our Board! We are excited by the experience and new points of view they will add to our tireless volunteers. We did this after saying, "Goodbye and Thank you" to a dear

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Kenneth Kieser, right, of Lake Waukomis, MO, is congratulated by KWF President Angela Anderson of Emporia for being selected as the Conservation Communicator for 2015. Photo by David Zumbaugh of Shawnee.

Conservation Communicator Kenneth Kieser

Kenneth Kieser is the consummate communicator, with a career spanning nearly four decades. His byline has appeared in thousands of articles, in both magazines and newspapers, and most of these covered Kansas and Missouri outdoors. For several years his stories have been published in the weekly outdoor columns for the Leavenworth Times and in columns for the Olathe Daily News and for Olathe's 50 and Better magazine. In addition, his works - both writings and photography - have appeared in most of America's top outdoor publications.

Kenny has also written Missouri destination travel articles, and he often writes on conservation issues including a stint of writing weekly news releases for the Missouri Department of Conservation's Kansas City Office. Overall Kieser's stories on a variety of outdoor topics have appeared in more than 65 publications.

Kieser claims that his main focus has always been conservation, and to that end he has won several key battles including one that kept KCP&L from building a giant grid through the middle of Mound City and Squaw Creek's hunting and conservation areas – thus preserving a vital area of the Mississippi Flyway.

Getting kids involved in the outdoors has always been one of Kieser's concerns. He has developed fishing programs for mentally and physically challenged children (one such program was sponsored by Easter Seals and the Kansas City Chiefs), and other programs for single parents and healthy

kids. Kenny gives power-point presentations throughout the year to promote youth involvement in outdoor activities. Kieser also designed a writing program for sophomores at Park Hill High School in Kansas City and St. James Academy in Olathe, Kansas, and some of the students from Park Hill won writing awards at the national level.

Kieser's latest book, "Missouri's Great Flood of '93 – Revisiting an Epic Natural Disaster" was released in June, 2013 with over 80 of Kenny's photos from the flood.

Kieser has been active in several writing organizations and has won many awards. He completed a three-year term on the Outdoor Writer's Association of America Board of Directors in 2002 and is now an active member of the Association of Great Lakes Outdoor Writers, the Western Writers of America, the Southeastern Outdoor Press Association (a past president), Kansas Outdoor Writers, and the Missouri Outdoor Writers.

Kieser's major awards have included induction into both the National Fresh Water Fishing Hall of Fame and the Waterfowler's Hall of Fame. Kenny has received several first place awards for his writings from a variety of publications, but perhaps his favorite "award" was the "fine gobbler" he garnered during the Governor's One Shot Hunt during Joan Finney's term as governor.

It is an honor for the Kansas Wildlife Federation to recognize Kenneth Kieser as the Conservation Communicator of the Year for 2015.

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KANSAS WILDLIFE FEDERATION

Officers and Board of Directors

The Kansas Wildlife Federation promotes hunting and fishing opportunities and associated recreation for the benefit of all hunters, anglers and conservationists.

KWF supports the sustainable use and management of fish and wildlife and their habitats through education, partnerships, outreach and policy oversight.

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Denise Scribner, right, of Wichita, is congratulated by KWF President Angela Anderson of Emporia for being selected as the Conservation Educator for 2015. Photo by David Zumbaugh of Shawnee.

Conservation Educator Denise Scribner

Denise Scribner, after working with Girl Scouts for 32 years, has a remarkable list of accomplishments in the field of conservation education. Denise is currently into her second career, working as a high school teacher at Eisenhower High School in Goddard Kansas, and it has been during her tenure as a teacher that her talents as a Conservation Educator have come to the fore.

Following are just some of her activities and accomplishments:

- ♦ Lead for Eisenhower High School receiving the 2012 National Green Ribbon School award (one of 78 schools nationwide);
 - ♦ Kansas Green Schools award;
- ♦ Leadership in developing an award winning on-site campus Outdoor Wildlife Learning Site (OWLS) which has set the standard of excellence for schools in Kansas the site is a Certified Wildlife Site (via NWF) and a Certified Monarch Way Station, (via Monarch Watch);
- ♦ Annual "Celebrate Earth" event conducted by her ecology/biology/forensic science students for over 500 districtwide 3rd 5th graders. This event was highlighted by National Public Radio;
- ♦ Assisted her school district in receiving a grant to refit district diesel buses to reduce emissions by 75% and save up to 25% in fuel expenses annually for the district bus fleet:
- ♦ Member of the Kansas Leadership Team for Environmental Literacy and Education supported by the Kansas Association

- of Conservation and Environmental Educators (KACEE) and KDHE;
- ♦ With assistance from the Westar Green Team employed her ecology classes to construct an outdoor classroom out of repurposed wood;
- ♦ She has written and received numerous grants to support conservation education in her school, including: the Lowe's Toolbox for Education \$5,000 grant, three TGIF grants totaling \$1,500, two \$3,000 Kansas Green School grants, and two NSF grants to attend professional development courses.

Scribner has already received several awards for her work, including:

- ♦ a Fulbright Teacher Exchange scholarship to go to Japan and study sustainability education in 2012;
- ♦ awards from KACEE for her excellence in conservation and environmental education, and;
- ♦ the 2012 Presidential Innovation Award for Environmental Education (one of 17 awarded nationally).

Denise Scribner has committed her life to lifelong learning and is constantly upgrading her professional development, which is good news for both her students at Eisenhower High School and for the Kansas environment in general.

In conclusion, Denise Scribner is the type of teacher everyone would want for their child. This recognition of Denise as the 2015 Conservation Educator of the Year by the Kansas Wildlife Federation is well deserved.

Conservation Legislator

Senator Terry Bruce

Senator Terry Bruce is the Senate Majority Leader, a position that has great influence over many of the bills dealing with our natural resources and the sportsmen and women of Kansas. Prior to serving in a leadership role, Sen. Bruce served on the Senate Natural Resources Committee, the primary committee in which bills dealing with the Kansas Department of Wildlife, Parks and Tourism (KDWPT) traverse, so he is intimately familiar with conservation issues.

Serving since 2005, Sen. Bruce has been a staunch defender of the principles of the North American Model of Conservation, Second Amendment issues that impact the KDWPT's constituents and has professionally represented his constituents in many dealings with KDWPT. In addition, Sen. Bruce worked tirelessly and was invaluably instrumental during the 2015 Legislative Session to help defeat a particularly egregious and onerous bill that the Department and many of its constituents opposed.

We can think of very few others who have supported the sportsmen and wildlife of Kansas in the Legislature the way that Senator Terry Bruce has. The Kansas Wildlife Federation appreciates his service to



Senator Terry Bruce, right, of Hutchinson, is congratulated by KWF President Angela Anderson of Emporia for being selected as the Conservation Legislator for 2015. Photo by David Zumbaugh of Shawnee.

Kansas citizens and wildlife and is honored to be able to recognize Terry Bruce as the

Conservation Legislator of the Year for 2015.

Conservation OrganizationKansas Chapters of Fishing's Future

Fishing's Future is a national non-profit organization founded in 2007 on South Padre Island, Texas by 1st grade teacher, Shane Wilson. This organization utilizes the sport of fishing to help strengthen family bonds, teach environmental stewardship, provide angling ethics, responsibility and aquatic education to schools and organizations, but most of all, to get youth and families into the Great Outdoors: "Outside for a Better Inside!"

The mission of Fishing's Future is to reconnect youth and families with our natural world and to provide certified volunteer support to state and local agencies such as the Kansas Department of Wildlife, Parks and Tourism (KDWPT) and civic organizations. To serve these goals, Fishing's Future conducts workshops to certify volunteer instructors and establishes chapters headed by a Master Angler, to host angling outreach, education programs.... to teach people how to teach people how to fish and to provide



Pictured is Stuart Scott of Wichita, with the Harvey County Parks and Recreation; Bill Horvath of Leavenworth, with Fort Leavenworth Rod and Gun Club; Angela Anderson of Emporia, KWF President; Phil Taunton of Emporia, Master Instructor; Rue Armstrong of Topeka, with Flint Hills Chapter of B.A.S.S.; and Dave Foster of Dodge City, with Dodge City High School's Demon Club. All are members of Fishing's Future Chapters of Kansas. Photo by David Zumbaugh of Shawnee.

Outdoor Skills Instructor

Dave Foster

Dave Foster is a physical education teacher and head football coach at Dodge City High School. He is also an avid outdoorsman who believes that kids should have access to outdoor activities. (Dave spends a lot of time outdoors himself: hunting, fishing, and kayaking, and he also teaches hunter safety courses.) These personal attributes tell us a lot about why he is being honored by the Kansas Wildlife Federation's Conservation Achievement Program.

Foster's involvement in physical education has helped him understand how important it is for kids to be active ... and how important it is for the overall health of the kids that at least some of this activity occurs outdoors. As a coach, Foster is also an "activist" who understands that if you want to get something done, you may have to do it yourself.

Dave noticed that the majority of his students no longer have access to the outdoors; many have never fished or hunted. Couple this with the fact that western Kansas is not

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Dave Foster, right, of Dodge City, is congratulated by KWF President Angela Anderson of Emporia for being selected as the Outdoor Skills Instructor for 2015. Photo by David Zumbaugh of Shawnee.

Water Conservationist

Water Vision Team

The Governor's 50 Year Vision states in its Mission Statement, "Provide Kansans with the framework, policy and tools, developed in concert with stakeholders, to manage, secure and protect a reliable, long term statewide watersupply while balancing conservation with economic growth." This statement is not just words to the Vision Team that has spent many months and many miles to listen to the needs of Kansans, in order to ensure they have water for themselves and their future generations. The Vision Team worked diligently to create a document that was living, effective, and necessary. Now that same Team works to ensure that document is being put into action in order to provide Kansans with the tools they need to have successful water supplies and economies.

This Team was nominated for this award because they meet the description of the award criteria to the letter. The Water Conservation award reads "For outstand-

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KWF President Angela Anderson of Emporia congratulates members of the Kansas Water Vision Team, Susan Metzger of Manhattan, Earl Lewis and Lane Letourneau, both of Topeka, for being selected as the Water Conservationist for 2015. Photo by David Zumbaugh of Shawnee.

Forest Conservationist

Thad Rhodes

For 14 years Thad Rhodes has been assisting the people of Kansas with the management and care of their forests, woodlands, and shelterbelts. He has been active in reforestration, windbreak renovation, prescribed fire, oak silviculture, riparian forest restoration, and wildlife habitat.

Thad has provided forest conservation training to Kansas landowners through numerous workshops over the years, educating thousands of landowners. He regularly works with local Conservation Districts to offer forest conservation training to thousands of youth via field days and Kansas Envirothon. Additional workshops he has offered include those given for the National Wild Turkey Federation, Flint Hills Pheasants Forever, Kansas Forest Service Field Days, the Wildlife Habitat Resource Roundtable, and the Jeffery Energy Center Wildlife Habitat Tour. Rhodes has also authored a variety of publications in coordination with KDWPT including one titled Forest

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Thad Rhodes, right, of Wamego, is congratulated by KWF President Angela Anderson of Emporia for being selected as the Forest Conservationist for 2015. Photo by David Zumbaugh of Shawnee.

ORGANIZATION

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quality outdoor experiences such as fishing derbies, clinics and family fish camps!

Kevin Reich of Salina is director of the Kansas Fishing's Future's chapters and so far there have been thirteen chapters formed that range across the state from Fort Leavenworth to Dodge City! KWF's Phil Taunton (along with many others) has also been instrumental in the spread of Fishing's Future across Kansas, and the association has recently formed a valuable partnership with KDWPT's FishKS Program.

Bryan Sowards, who is the former aquatic education coordinator for KDWPT: "The partnership with Fishing's Future

has improved the quality of our KDWPT FishKS Program. Fishing's Future has expertise in training and teaching volunteers to be instructors. These volunteers are getting children and families excited about fishing on KDWPT's behalf. The FishKS Program is stronger than ever, able to make a presence at many more events each year and able to reach many more future anglers."

The first Angler Education event was presented at the Great Plains Nature Center in Wichita in August, 2013 and since then nearly 350 volunteer instructors have been certified. Since January, 2014 these volunteers have contributed over 3,000 volunteer hours (as of July, 2015).

Thanks to Fishing's Future more children are reconnecting with Nature by

spending more time outdoors (and less time glued to their computers and cell phones). What's more, outdoor activities such as fishing help youngsters avoid the dreaded "Nature Deficit Disorder", a malady linked to increased childhood depression, attention deficit disorder, and obesity.

No other sport gets families and friends, young and old alike, together in a relaxing atmosphere ... where the opportunity to bond, enjoy our natural world and to talk about life are maximized. Thanks to Kevin Reich and the Kansas Chapters of Fishing's Future the future of the sport is strong in Kansas.

The Kansas Wildlife Federation is proud to present the 2015 Conservation Organization of the Year award to the Kansas Chapters of Fishing's Future.

PRESIDENT

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KWF friend, Randy Kidd, who retired off the Board. We will miss Randy's smiles, laughter, and zeal.

The Kansas Wildlife Federation will continue to advocate for wildlife,

sportsmen, environmental educators and outdoor enthusiasts, through your help and support. The Kansas Wildlife Federation once again pledged to spend the upcoming year working to introduce youth, the future stewards of the earth, to the rewards and satisfaction of getting outdoors and becoming engaged with nature. We have some exciting new youth

outdoor events in the planning stages to be added to what we already offer. It is easy to help the Kansas Wildlife Federation to "plant a tree" in the lives of youth. Simply visit www.kswildlife.org, click on the membership/donate button where PayPal may be used. The first best time to help may have been over 65 years ago. The second best time is now.

Sign up for women-only workshop to Become an Outdoor Pro

If you've ever wanted to pick up a bow and hit a bullseye, pitch a tent without any help, clean a fish you caught, or start a fire in no time flat, sign up for the 2016 Spring Becoming An Outdoors-Woman (BOW) workshop May 13-15. Participants of BOW will spend a weekend away at Camp Wood YMCA in Elmdale learning anything and everything they want to about the outdoors. And the best part is, there's no pressure.

Offered through the Kansas Department of Wildlife, Parks and Tourism, BOW is

designed to teach women outdoor skills in a fun, friendly, and laid-back atmosphere. With 27 different classes to choose from, participants can have fun mixing and matching the topics they learn about.

Cost for the three-day workshop is \$235, which includes lodging, meals and class supplies. Three \$100 scholarships are available to first-time participants based on financial need.

Early registration will be open to firsttime participants through March 27. If spots still remain, past participants may register beginning March 28. Applicants are encouraged to apply early as the spring workshop is limited to 40 participants. To register, visit www.ksoutdoors.com and click "Education," then "Becoming an Outdoors Woman."

For questions, call or email Jami McCabe at (785) 845-5052 or kansasbow@sbcglobal.net.

To learn more, and view pictures of past workshops, visit the BOW Facebook page found under "Becoming an Outdoors Woman KANSAS."

Regular goose seasons closed Feb. 14, Conservation Order open

The last of the regular waterfowl seasons closed in February when Canada, white-fronted and light goose seasons ended Feb. 14. However, under the Spring Conservation Order, light geese are still in season Feb. 15 through April 30, 2016. Light geese include snow and Ross' geese.

The U. S. Fish and Wildlife Service established the Conservation Order 16 years ago in an effort to use hunting to reduce the populations of light geese. The breeding population of mid-continent snow and Ross' geese is estimated to exceed 5 million birds, an increase of more than 300 percent since the 1970s. A popula-

tion this high is seriously degrading and even destroying the fragile arctic tundra habitat where the birds traditionally nest, impacting not only light geese but a variety of shorebird species that also nest on the tundra.

Biologists believe the population has grown for several reasons, including changes in farming practices on the Great Plains that provide abundant food for the birds during both fall and spring migrations. Also, light geese are relatively long-lived as far as migratory birds go, 8-20 years, and they travel in very large flocks, making them difficult to hunt.

Special regulations during the Conservation Order are designed to make hunters more effective. The shooting hours, which normally end at sunset during regular seasons, continue until one-half hour after sunset. A plug restricting the number of shells held in a shotgun's magazine is not required, and electronic calls are allowed. To fool and attract large flocks of snow geese, hunters must set out hundreds or even thousands of decoys. An electronic call can make the decoy setup seem more realistic. There is no bag or possession limit for light geese during the conservation order.

RHODES

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Management for Wildlife.

Through his Master's thesis, Rhodes has provided valuable insight into how to effectively promote forest conservation.

In addition Thad has been active in leadership roles in forest conservation in a variety of ways, including: memberships in the Society of American Foresters (Chair of the Great Plains Society), the Kansas Chapter of the Walnut Council, and he has served on the Kansas Forestry Association Board. Rhodes is a certified Tree Farm Inspector who promotes sustainable forest management through the American Tree Farm System,

and he has been a leader in the introduction of prescribed fire into Kansas oak-hickory forests facilitating research at K-State's Howe property.

Some Numbers: While bare numbers don't make the measure of the man, and it is next to impossible to document all the impressive list of accomplishments Thad has made during his 11-year tenure with the Kansas Forest Service, following are just some of the more recent ones that Thad has accomplished in just the past six years, with an emphasis on 2015: Thad has provided direct technical assistance through on-site visit with 356 landowners. He has diagnosed insect and disease problems and wildlife habitat potential. He has authored 375 forest management plans, bringing 5,120 acres of private forest land under management. This includes long-term comprehensive Forest Stewardship Management Plans, Forest Management Plans, and Practice Plans to implement forestry practices for tree planting, forest stand improvement, riparian forest buffers, and windbreak establishment and renovation.

Thad Rhodes' expertise, conservation work ethic and quality of service to the people of Kansas are impressive and while his accomplishments are many, to his friends Thad remains a true gentleman with an acute sense of propriety.

For his dedication and interest in sustaining the productivity of woodlands and the wildlife that benefit from them, Thad Rhodes is the winner of the 2015 Kansas Wildlife Federation Forest Conservationist of the Year.

New partnership provides landowner assistance in range health improvements

The Kansas Department of Wildlife, Parks and Tourism, in cooperation with the Natural Resource Conservation Service, Ranchland Trust of Kansas, and Kansas Grazing Coalition, are excited to announce a new partnership designed to assist landowners with range management and improvement projects. Termed the Regional Conservation Partnership Program (RCPP), the newly-formed partnership will aim to improve overall range health in the Smoky Hills region of Kansas by providing costshare assistance to landowners. The Smoky Hills are important to cattle producers and numerous wildlife species, but both are

being threatened by invasive trees, noxious weeds and other sources of degradation. The RCPP seeks to address some of these issues and ultimately improve the health of Smoky Hill rangelands.

The RCPP will focus on 16 counties within the core of the Smoky Hills, with wildlife biologists designated for specific areas. Some land management practices that will be available for cost share under this collaborative effort include brush management, herbaceous weed control, prescribed burning and prescribed grazing. Landowners interested in more information about this partnership are encouraged to contact

their local wildlife biologist for the county in which their land is located.

For counties Ellsworth, Russell, Lincoln, Saline, and Ottawa, contact James Svaty at (785) 658-2465 ext. 204.

For counties Smith, Osborne, Jewell, Mitchell, Republic, and Cloud, contact Lucas Kramer at (785) 545-3345.

For counties Washington, Clay, and Dickinson, contact Clint Thornton at (785) 461-5095.

For Marion County, contact Jeff Rue at (316) 772-2706. For McPherson County, contact Kyle McDonald at (620) 662-2799.

Five-year hunt/fish licenses offer savings and convenience

Kansas Department of Wildlife, Parks and Tourism license and permit fee increases took effect Jan. 1, 2016 and with those fee changes, some new licenses are being offered. Five-year hunting, fishing and hunt/fish combination licenses are now available and offer significant savings compared to purchasing licenses individually each year. A five-year hunting or fishing license is \$102.50, compared to purchasing the \$27.50 annual hunting or fishing license each year for five years - \$137.50. A five-year hunt/fish combination license is \$182.50, compared to buying an annual combination hunt/fish license for five years – \$212.50 if purchased before Feb. 1, or \$237.50 if purchased after Jan. 31.

The five-year licenses offer convenience and savings; however, they do not provide the holder resident status if they should move from Kansas before the license expires. The license is valid through its expiration date, even if the holder moves to another state, but a five-year hunting license holder who becomes a nonresident is required to purchase nonresident deer and turkey permits. And therein lies the difference and perhaps confusion when comparing the five-year licenses to lifetime licenses. The holders of lifetime hunting licenses are always considered Kansas residents when purchasing turkey and big game permits, regardless of where they live.

Another new license offered this year is the early-purchase annual hunting/fishing

combination license. If purchased before Feb. 1, the price is \$42.50. If purchased after Jan. 31, the price is \$47.50. If you purchase your hunting and fishing licenses individually, you'll spend \$55.

The license fee increases were necessary to maintain and enhance pivotal hunting and fishing programs. Deer and turkey permit prices had not increased since 1984 and general hunting and fishing license fees had remained the same since 2002. Youth and senior lifetime pass license fees were not increased.

For more information on 2016 license and permit fees, go to www.ksoutdoors.com and click "Licenses & Permits" in the top menu.

FOSTER

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exactly known for its scenic fishing lakes, and Foster had his work cut out for him.

First came the lake. If it's not there, build one yourself. With support from school administrators and KDWPT regional fisheries biologist, Lowell Aberson, over a three year period Foster teamed with KDWPT Community Fisheries Assistance Program to obtain \$120,000 grant funding to build a lake on a nearby marshy area. Ford County helped with an in-kind donation of dirt work in exchange for soil for road projects.

To insure adequate water supply, Kansas Department of Health and Environment approved a tie-in with Dodge City's new wastewater treatment plant. Demon Lake, named after the school's mascot, was dedicated in August.

Next came the stocking – with bluegill and channel catfish (largemouth bass to be added this spring). And then the how-to of fishing – for a population of kids, parents and grandparents not yet educated. Kansas' Fishing Future's Future program trained teachers and provided curriculum, and KD-WPT aquatic education program donated 60 rods and reels, as well as tackle. In addition, school teachers are already working on additional conservation-oriented curricula,

centered on the pond, and additional habitat will be added as the need arises. Student fisherfolk don't just dunk worms; they need to learn how to tie knots and practice casting ... and how to stick the wriggly worm onto the hook.

Finally the fishing. And how has that worked out? On one special week Demon Lake captivated 700 students, about a third of the school. And according to one of the instructors: "It's extremely special to witness the eyes of a 14 to 18 year old kid light up when they catch their first fish."

The Kansas Wildlife Federation is proud to present to Dave Foster the recognition of Outdoor Skills Instructor of the Year for 2015.

Youth identifies 225 bird species in Kansas

Cardinals, sparrows, bluejays and doves might be the extent of your bird identification knowledge, and that's okay, but wouldn't it be neat to know what kind of bird is plucking those bugs off your bumper? Or what kind of bird is building a nest in your favorite tree out back? For birders, keeping a running tally of the species they identify is an ongoing challenge. And for Sam Schermerhorn, Wamego, who competed in the youth category of the 2015 Kansas Birding Big Year contest, that tally was 225 species observed during the year. Schermerhorn won his category, comparing respectably to the overall winner, Andrew Burnett, who observed 317 species, an outstanding total for the state.

For three years running, the Kansas Department of Wildlife, Parks and Tourism has hosted a Birding Big Year contest where participants join in a friendly competition to see who can identify the most bird species in a calendar year. The competition is divided into three age categories: youth (17 and under), adult (18-64), and senior (65+), with the adult category being broken down into three skill levels.

The results for 2015 were spectacular: **ADULT DIVISION Advanced**

1st – Matt Gearheart, 288

2nd – Pete Janzen, 262

3rd – E.J. Raynor, 259

4th – Brett Sandercock, 256

5th – Carol Morgan, 231

Intermediate

1st – Andrew Burnett, 317

2nd – Sue Newland, 283

3rd – Malcom Gold, 277

4th - Nick Varvel, 275

5th – Tom Ewert, 245

Novice

1st – Don Merz, 287

2nd – Jennifer Hammett, 252

3rd – Todd Becker, 172

YOUTH DIVISION

1st – Sam Schermerhorn, 225

2nd – Ella Burnett, 194

3rd – Joshua Keating, 142

4th – Jacob Keating, 137

5th – Emma Littich, 91

SENIOR DIVISION

1st – Mick McHugh, 267

2nd – Dan Larson, 241

3rd - John Row, 208

OVERALL WINNERS

1st – Andrew Burnett (Erie) - Adult, Intermediate, 317 species

2nd – Matt Gearheart (Lenexa) - Adult, Advanced, 288 species 3rd – Don Merz (Horton) - Adult, Novice, 287 species

4th – Sue Newland (Wakarusa) - Adult, Intermediate, 283 species

5th – Malcom Gold (Overland Park) - Adult, Intermediate, 277 species

Apart from bragging rights, winners of the 2015 contest will receive prizes donated from several sponsors, including Bass Pro Shops, Cabela's, The Coleman Company, Acorn Naturalists of Tustin, Calif., and the KDWPT Education Section.

The winners of each category will also each receive matted and framed original ink drawings of native Kansas bird species, drawn and donated by Dr. Robert Penner of Ellinwood, as well as a signed copy of Penner' book, Birds of Cheyenne Bottoms. Dr. Penner is the land steward and avian projects coordinator for the Nature Conservancy at Cheyenne Bottoms.

If you're interested in participating in the 2016 competition, visit http://ksoutdoors.com/Services/Wildlife-Diversity/2016-Kansas-Birding-Big-Year for details.

Whether it's time spent outdoors, or time spent with the ones you love that will get you out the front door, consider making birding an item on your to-do list this year. And take a kid with you.

Loss of Honey Bees

By Brad Guhr Dyck Arboretum of the Plains

We are hearing a lot in the news about the loss of honey bees, which we know is a potential threat to our food systems. But before I address this topic further, allow me to say a bit about insect diversity. The world of flowering plants is diverse with an estimated 352,000 species worldwide, but its diversity pales in comparison with the insect world that is estimated to be 15 times more diverse, with a species count of somewhere around 5.5 million species. Approximately 20,000 new species of insects are discovered each year. It is estimated that we may currently know only about 20% of the world's existing insects. I share this to say that topics related to insects are complex and that we are far from having all the answers about any topic related to pollinators.

Now, back to honey bees. A 2014

U.S. Department of Agriculture report states that honey bee colony loss has experienced an eight-year average loss of 29.6 percent per year. Recognized factors for this decline include viruses and other pathogens, parasites, problems of nutrition from lack of diversity in pollen sources, and sublethal effects of pesticides combining to weaken and kill bee colonies. Colony Collapse Disorder (CCD) is a name that was given about ten years ago to this population loss that is often seen suddenly in bee hives.

Pesticide contamination, and specifically the group of neurotoxic insecticides called neonicotinoids, is coming under increased focus as a possible cause of CCD. The insecticide is applied to the seed coat of many common crops, taken up by plant roots, and translocated to all parts of the plant, including flowers and pollen. Neonicotinoid use in crop protection has increased dramatically in the last 20 years and significant financial invest-

ments have been made to implement this effective group of insecticides.

Whether or not neonicotinoids that are showing up in beehives are causing CCD is not something I can answer here. Some European countries think there is a connection and have begun to ban the use of neonicotinoids. The validity of the connection between neonicotinoids and CCD is a complex issue that can only be answered with unbiased, scientific research. If chemical producers feel strongly that neonicotinoids are not contributing to CCD, I think that they would want to be pouring money into reputable research to clear their products from blame.

The viability of natural ecosystems and healthy food systems relies on both native pollinators and honey bee populations. Local farmer and beekeeper, Deborah McSweeney, has invested significant time researching and living this topic and also knows a lot about bee population collapse.

Keep wildlife wild, leave young wildlife alone

The arrival of spring means the arrival of newborn and just-hatched wildlife. These youngsters soon venture into the world on shaky legs or fragile wings and are discovered by people living, playing, or working nearby. Every year, the lives of many young wild creatures are disturbed by people who take young wildlife from the wild in a well-intentioned attempt to "save" them.

These well-meant acts of kindness tend to have the opposite result. Instead of being left to learn their place in the world, young wildlife removed from the wild are denied important natural learning experiences which help them survive on their own. Most people quickly find that they can't really care for young wildlife, and many of the animals soon die in the hands of wellmeaning people. Young wildlife that does survive human "assistance" miss experiences that teach them to fend for themselves. If these animals are released back into the wild, their chances of survival are reduced. Often, the care given to young wildlife results in some attachment to humans and the animals may return to places where people live, only to be attacked by domestic animals, or hit by cars. Some animals become nuisances and people have been injured by once-"tamed" wildlife.

Avoid these problems by following one simple rule when coming upon young wildlife: If You Care, Leave Them There! It may be difficult to do, but this is a real act of compassion. Generally young mammals are visited by the adults only a few times a day to avoid leaving traces that attract predators. For instance, a nest of bunnies will only be visited by the adult female twice per day to nurse the young. The young wildlife are quite safe when left alone because their color patterns and lack of scent help them remain undetected. Avoid nest and den areas of young wildlife and restrain all pets. What if you find a young bird that has fallen from a nest? Baby birds found on the ground may be safely picked up and placed in a nearby bush or tree. Adult birds (and other kinds of wildlife) are not disturbed by human scent and will not abandon their young if

handled by people.

Leave fawns (young deer) where they are found. Fawns are safest when left alone because their camouflaging color helps them remain undetected until the doe returns. If sympathetic people repeatedly visit a fawn, it can prolong the separation from the doe and delay needed feeding. Unlike deer, newborn moose calves remain in close proximity to their mothers who, in contrast to a white-tailed doe, will actively defend calves against danger. An adult cow moose weighing over 600 pounds will chase, kick or stomp potential predators, people included.

Only when young wildlife are found injured or with their dead mother may the young be assisted, but must then be delivered immediately to a licensed wildlife rehabilitator. It is illegal to possess most wildlife in Kansas without a permit. Information on young wildlife and a list of wildlife rehabilitators is posted on the Kansas Department of Wildlife, Parks and Tourism website http://kdwpt.state.ks.us.

2016 Fishing Forecast ready for anglers

Anglers like to keep their best fishing holes secret, but that's hard to do now that the Kansas Department of Wildlife, Parks and Tourism (KDWPT) produces the annual fishing forecast. The forecast is a compilation of data gathered by KDWPT district fisheries biologists throughout the year. The data comes from sampling efforts, including test netting, electroshocking and creel surveys. The forecast presents this data in a format that lets anglers find waters that contain their favorite species in both good numbers and the size they prefer.

For example, if you like to catch crappie, you can use the forecast to find a reservoir, lake or pond where the biologist found lots of crappie during sampling efforts last fall. A quick look at the reservoir category for white crappie shows that John

Redmond Reservoir is ranked No. 1 for Density Rating, which is the number of crappie longer than 8 inches caught per unit of sampling effort. If you're more interested in quality-sized crappie, then look at the Preferred rating, which is the number of fish caught during sampling that were 10 inches long or longer. Again, John Redmond is No. 1, by a large margin. Twothirds of the fish sampled in John Redmond last fall were longer than 10 inches. The Lunker Rating (crappie longer than 12 inches) for this lake is also No. 1 among Kansas reservoirs. So, John Redmond will be a great place to catch crappie this year, both in terms of numbers and size.

Theoretically, a reservoir with a Density Rating of 32 will have twice as many crappie 8 inches long or longer than a lake with a Density Rating of 16. However,

there are often other factors that may influence sampling results, and some lakes may not be sampled every year, so the forecast includes other ratings such as the Biologist's Rating. A biologist may feel that the numbers don't accurately reflect the fish population, so they enter a rating of Excellent, Good, Fair or Poor. The Three-year Average is there because a lake may not have been sampled this past year. It shows an average of the past three years of Density Ratings. And finally, there is a Biggest Fish rating, which simply lists the biggest fish caught during sampling.

Anglers can view the forecast at www. ksoutdoors.com, and in printed brochures that will soon be available at KDWPT offices. Use the 2016 Fishing Forecast to find your own fishing hot spots this spring.

WATER

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ing achievement in water pollution control, conservation, and protection of rivers and wetlands, prevention of degradation of

water quality through effective planning and management or other activity aimed at maintaining or improving water standards." This Team has undeniable achieved this, not only because they created a stellar working document, but because they have begun the means to which the citizens of Kansas are taking responsibility for what is

important to them and showing them how it can be done.

The Vision Team is truly teaching Kansans to fish, not just feeding them one fish at a time. For their efforts the Water Vision Team is the Kansas Wildlife Federation Water Conservationist of the Year for 2015.

Don't let ticks take a bite out of your turkey hunting

By Bill Miller

I don't remember it being this way in my carefree days of youth, but ticks have become a turkey hunting fact of life. As you read this, chances are good somewhere there's a tick crawling up the leg of some unsuspecting turkey hunter sitting in the woods. In any pursuit that involves hiking through the woods or even the grasslands, there are ticks out there waiting to suck your blood. Losing a few corpuscles won't harm you that much, but some ticks may leave you with a longer-lasting parting gift.

The list of tick-borne diseases just keeps growing. Take it from someone who spent five days in the hospital and two additional weeks of intravenous antibiotics following a tick bite incurred while turkey hunting—and they never did figure out what I had!

After that experience, I've become

somewhat of a fanatic about avoiding tick bites. Here are some of the tips I've picked up in recent seasons.

While traditional DEET repellants may help deter ticks, products containing the chemical permethrin are a more secure choice and the treatment lasts longer.

Warning! Permethrin repellants are not meant for direct application to human skin! These should be applied only to clothing with a brief drying period before putting those garments on. Keep it to the outer layers. Heavy up on your socks, pants cuffs and shirt sleeves—the places where ticks are mostly likely to begin their crawl.

In addition to using both DEET and permethrin repellents, the surest system incorporates physical barriers to ticks—especially the right clothing. Turkey hunters in particular are wont to just sit down about anywhere, and that's when ticks invade.

Successful turkey hunting requires absolute stillness, so even when you see or feel ticks crawling on you, you can't do anything about it. So the best thing to do is keep them from access to your skin in the first place

Any fine-mesh bug suit works well, and they are made large enough to slip over any clothes you want to wear underneath. Look for a suit with a head net built right into the hood; the fewer openings, the less chances there are for bugs to find their way inside. Elastic cuffs are good, but when the bugs are especially bad, it's a good idea to secure cuffs at the wrists and the ankles with duct tape. Don't worry; there aren't any fashion contests out in the turkey woods!

The next generation in tick deterring clothing is ElimiTick from Gamehide. They

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Enjoy prime land access for Spring Turkey through Special Hunts

It's hard to beat hunting turkeys during the spring season in Kansas. Weather has warmed up, birds are active and on the move, and it's the start of a new hunting season. But what if there was a way to top this? There is. Try adding special access to quality lands not normally open to hunting, and it wouldn't cost you a penny. If you think this sounds like a pipe dream, chances are, you aren't familiar with the Kansas Department of Wildlife, Parks and Tourism's Special Hunts Program. Special Hunts provide access to public and private lands that are not open to

unrestricted public access. There's no fee to apply, the draw is open to residents and non-residents, and opportunities abound, with 160 individual permits and 79 special hunts available for spring turkey this year. Applications are being accepted through 9 a.m. on Feb. 29. To apply, and to obtain detailed information on all available hunts, visit ksoutdoors. com/Hunting/Special-Hunts-Information.

Out of the 79 hunts available, 29 are open hunts (open to all), 19 are mentor hunts (both beginner and mentor may hunt), and 31 are youth hunts (youth hunt only). These hunts will occur on nine separate land parcels spanning five counties, five wildlife areas, two city and county properties, one state park, and one national wildlife refuge.

Successful applicants will be notified shortly after the random drawing has occurred. Special Hunts only provides access, so hunters must still purchase all licenses and permits required by law.

For information on other spring turkey hunting opportunities, visit www.ksoutdoors. com and click "Hunting" and "Turkey Information."

Public land turkey hunters encouraged to use iSportsman

Turkeys can be unpredictable – one minute they're off in the distance, the next minute they're approaching you from behind. Every minute counts during turkey season, and time spent filling out a traditional daily hunt permit card could mean the difference between a good hunt and a great hunt. Optimize your time afield this spring by utilizing the iSportsman electronic check-in system and ensure your hunting hours are saved for the field.

The iSportsman electronic permit

system, which is more efficient and economical than the paper system, offers hunters the flexibility to check in and out of select wildlife areas from any computer, smart phone, cellphone or landline. Hunters can register for a free account by logging on to https://kdwpt. isportsman.net. Upon completing the registration, hunters will obtain a general access permit. They can then log on or call in before they plan to hunt to "check in." After a hunt is complete, hunters can then log on or call in to report harvests

and "check out" of the system.

The iSportsman electronic check-in system is currently in use at the following wildlife areas: Cheyenne Bottoms, Clinton, Elwood, Isabel, Jamestown, Kansas River, Lovewell, Lyon, McPherson Wetlands, Melvern, Milford, Neosho, Slate Creek Wetlands, and Texas Lake. A similar system has been used at Fort Riley for several years.

For more information on iSportsman, call (620) 672-5911 or visit https://kd-wpt.isportsman.net

Thirty-two fishing spots to catch trout in Kansas

We know what you're thinking: trout in Kansas? Impossible. But, it's true. While these spotted beauties may not be native to the Sunflower state, that doesn't mean anglers fishing in Kansas can't enjoy luring one ashore this winter. Thanks to a special program offered by the Kansas Department of Wildlife, Parks and Tourism, anglers can catch stocked rainbow trout at more than 30 public waters across the state. Trout are stocked in a total of 32 spots during the trout season, which is open through April 15. Waters are categorized as Type 1, which require all anglers to possess a \$14.50 trout permit, and Type 2, which require only those fishing for or possessing trout to purchase the permit.

The \$14.50 permit is valid for the calendar year and can be purchased wherever licenses are sold and online at ksoutdoors. com. In addition to the trout permit, resident anglers age 16-74 and nonresidents 16 and older must also have a fishing license. Unless posted otherwise, the daily creel limit is 5 trout. Anglers 15 and younger do not need a trout permit, but they may only keep two trout per day.

Type 1 Waters: Trout permits required of all anglers

Cedar Bluff Stilling Basin
Dodge City Lake Charles
Fort Scott Gun Park Lake
Glen Elder State Park (SP) Pond
Kanopolis Seep Stream
KDOT East Lake in Wichita
Lake Henry in Clinton SP
Mined Land Wildlife Area (WA) Unit

Pratt Centennial Pond
Walnut River Area in El Dorado SP
Willow Lake at Tuttle Creek SP
Webster Stilling Basin
Sandsage Bison Range and WA Sandpits (Periodically Dry)
Vic's Lake and Slough Creek in
Sedgwick County Park
Topeka Auburndale Park

Garnett Crystal Lake Type 2 Waters: Trout permits required only for trout anglers

Sherman County Smoky Gardens Lake (Periodically Dry)

Solomon River between Webster Reservoir and Rooks County #2 Road
Fort Riley Cameron Springs
Lake Shawnee - Topeka
Salina Lakewood Lake

Moon Lake on Fort Riley

Scott SP Pond
Hutchinson Dillon Nature Center Pond
Atchison City Lake # 1
Belleville City Lake (Rocky Pond)
(Periodically Dry)
Hulton Ellhorn Lake

Holton-Elkhorn Lake Syracuse Sam's Pond Cimarron Grasslands Pits Colby Villa High Lake Great Bend Vet's Lake

Trout permit required year-round*
Cherokee County – Mined Land WA
No. 30

*Because trout survive through the summer here, a trout permit is required year-round for anglers utilizing the lake.

Residents 16-74 years old, and all non-residents 16 and older must also have a valid fishing license. The daily creel limit is five trout unless otherwise posted. Anglers 15 and younger may fish without a trout permit, but are limited to two trout per day, or they may purchase a permit and take five trout per day. Possession limit for trout is 15.

For information on trout stocking schedules, visit www.ksoutdoors.com and click "Fishing/Special Fishing Programs for You/Trout Fishing Program."

Sportsmen Mobilize to Stop Transfer and Sale of Public Lands

By Theodore Roosevelt Conservation Partnership

Sportsmen's groups and industry members have launched an aggressive new campaign to rally against efforts by special interests to transfer or sell America's federal public lands, the Theodore Roosevelt Conservation Partnership announced.

Via the website www.sportsmensaccess. org, the rapidly growing coalition of groups and businesses includes the National Wild Turkey Federation, Backcountry Hunters & Anglers, Pheasants Forever, Quail Forever, Trout Unlimited, Dallas Safari Club, Mystery Ranch Backpacks, Sitka Gear, First Lite, Simms Fishing Products and Sage. The coalition supports a grassroots effort by sportsmen to urge lawmakers to reject any actions that would deprive citizens of their public lands.

A new report, "Locked Out: Public Lands Transfers Threaten Sportsmen's Access," released by the campaign, details takeover attempts in some Western states that would jeopardize public access to the rich hunting, fishing and outdoor traditions provided by the nation's public lands. A video call to action against public lands transfer complements the report.

"America's 640 million acres of federal public lands provide irreplaceable fish and wildlife habitat and public access for hunting and fishing," said Joel Webster, director of the TRCP Center for Western Lands. "Millions of American sportsmen use these lands each year to spend time with our families, challenge ourselves physically and put food on our tables. In fact, more than 72 percent of Western sportsmen depend on these lands for access to hunting.

"Special interests in some Western states, however, are proposing that these lands be transferred to individual states," Webster continued. "Sportsmen know firsthand that the transfer of these lands to individual states is not a legitimate option for addressing public land management challenges. We are committed to keeping public lands in the public's hands so that current and future generations of hunters and anglers can continue to access and enjoy them."

The management of America's vast system of public lands carries an enormous price tag, and state budgets could be stretched beyond their ability should they take over their ownership, with widespread industrial development and the eventual sale of these lands to private interests being the expected result. If privatized, millions of acres of the nation's most valuable lands and waters would be closed to public access, and an American birthright would be lost.

At the 2015 Shooting, Hunting and Outdoor Trade Show, or SHOT Show, sportsmen joined with industry members and policy experts this afternoon to end attempts to sell or transfer America's public lands.

"Our business is located in the West because of public lands," said Catie Webster, who manages public relations and brand strategy for Mystery Ranch, a Bozeman, Montana-based gear manufacturer. "Mystery Ranch's customers rely on America's public lands for access to mountains, lakes and rivers in order to pursue their outdoor

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After a year of pledges and promises, are we any closer to saving the Monarchs?

Thousands of acres of milkweed will be planted in the spring, But environmental groups say the focus on habitat isn't enough.

By Willy Blackmore TakePart

With the White House's Pollinator Research Action Plan and millions in donations and matching funds promised by the likes of Monsanto, 2015 was a landmark year for monarch butterfly conservation.

But with the news that Monsanto, Du-Pont, and the American Soybean Association—which are all tied to the drastic decline of monarch habitat across the U.S.—have signed on to yet another program promising to promote pollinator habitat conservation, you have to wonder what, beyond pledges and promises, is actually being done on the ground.

Much of the action that was promised last year—including the lofty White House goals to establish or improve 7 million acres of habitat and increase monarch populations to 225 million by 2020—will take time. Case in point: The first significant batch of habitat restoration projects that were awarded grants won't be planted until this spring, and those plantings will take time to establish and mature. And environmental groups warn that habitat restoration won't be enough to turn monarch populations around.

Still, grant money is making its way out into the world, and projects ranging from 10 to 10,000 acres in size have been funded across the country by the U.S. Fish and Wildlife Service, the National Fish and Wildlife Foundation, and the Monarch Joint Venture—three of the major groups facilitating the new national push on pollinator

issues. All told, the various habitat restoration programs the three groups have funded amount to around 70,000 acres of new or improved habitat across the U.S.—from the Driftless Area along the Mississippi River in Iowa and Illinois to recent burn areas in California's San Bernardino National Forest. With matching funds included, NFWF said the 22 projects it awarded grants to in 2015 will amount to just over \$10 million in "total on-the-ground impact," or, in other words, a whole lot of milkweed seed.

But planting more milkweed won't necessarily offset what's been lost over the past two decades, which have seen monarch populations drop from 1 billion butterflies down to fewer than 60 million. "There are myriad problems facing pollinators," said Lori Ann Burd, environmental health director at the Center for Biological Diversity. And while she readily acknowledges that lack of habitat is one of those problems, she's less concerned with Monsanto's conservation efforts than one of its best-selling products.

"The science is clear," she added.
"Glyphosate is the leading cause of the monarch decline. And with nearly 300 million pounds of it drenching soils in the U.S. and killing milkweed each year," even the newly recharged efforts to restore and improve habitat won't be able to make up the difference.

Monarch populations peaked in 1996, around the same time Roundup-ready varieties of corn, soy, and other commodity crops began to be widely adopted by American farmers. Prior to that shift, milkweed was

able to grow rather benignly alongside the row crops that dominate agriculture along the Interstate 35 corridor, which cuts from Texas up through the Midwest to Duluth, Minnesota, more or less mirroring the primary monarch migration path. Milkweed is the only species of plant that female monarchs will lay their eggs on, and monarch caterpillars rely on it for food throughout the larval stage. In short, if there is no milkweed, there are no monarchs. Once farmers were able to spray all their Roundup-ready crops with glyphosate, killing weeds without killing, say, corn, American farmland suddenly stopped doubling as habitat for the butterflies. Currently, there are some 400 million acres of cropland in the United

There are other types of projects that have earned new grant money—programs focused on milkweed seed production, educational programs, and other conservation efforts that fall outside direct planting in areas historically frequented by the butterflies. Additional efforts are also being undertaken with the funding and support of other public and private organizations. In 2016, for example, the USDA's Natural Resources Conservation Service will invest \$4 million across 10 states to provide food and habitat—or rather, a variety of wildflowers—for monarchs.

"Every little bit helps," Burd said. "But on the large scale, if we're going to be serious about recovering pollinators, then we have to address glyphosate use in this country."

Land and Water Conservation grants improve communities

Does a park in your neighborhood need a new playground? Has your community been waiting for the right time to put in a new picnic shelter, ball fields or a dog park? Now, with the reauthorization of the Land and Water Conservation Fund Act (LWCF), the time is right to make those projects happen.

LWCF grants have provided funding for more than 700 outdoor recreation projects

throughout Kansas since its inception in 1965. Kansas has received more than \$50 million that has helped create and enhance outdoor recreation opportunities in almost every county.

Grants require 50 percent matches, and properties where grants are used must remain in pubic recreational use for perpetuity. Grants are available to cities, counties, school districts and other government entities. Funding is administered by the Kansas Department of Wildlife, Parks and Tourism, through the National Park Service.

The application deadline is April 15, 2016, and competition for grants is intense, so it's important that applications be accurately and thoroughly completed. To learn more about the application process and to download an application, go to ksoutdoors. com/KDWPT-Info/Grants.

Climbing a mountain to see the view – Ski Bill success

By Sinjin Eberle American Rivers

Each time I drop my head and pause to catch my breath, a bead of sweat runs off the brim of my ballcap, landing between my boots. Lifting my feet to take the next step – left, right, left, right – takes me a few inches higher towards my goal – the 14,199ft summit of Mount Yale, one of the majestic Collegiate Peaks near Buena Vista, Colorado.

The trail I follow parallels Denny Creek, a 12-ft wide rivulet of cold, clean snowmelt, coursing down the mountain, meeting Cottonwood Creek near the trailhead where my truck is parked. Cottonwood Creek drifts down this tight valley, eventually intersecting with the Arkansas River in town. Every direction is spectacular beauty, wild nature, and the burbling sound of the creek as it falls its way through the Collegiate Peaks Wilderness in San Isabel National Forest.

But this scene recently dodged a close call.

A few months ago, The United States Senate was deliberating over the annual Budget Resolution, which sets the nation's overall funding priorities from everything to paying our soldiers who protect our nation, maintenance for our roads and bridges, funding for student loans, Social Security, and Medicare

Sen. Cory Gardner of Colorado proposed an amendment to the Budget Resolution calling on the Senate to pass legislation that would privatize rivers that run through public lands. Places like where I am standing to catch a breather right now.

The legislation that Sen. Gardner called for passing is the bill that the ski industry and its corporate agriculture and hydrofracker allies had been advocating for back in 2013. Thankfully, this legislation has so far been stopped cold by American Rivers and its allies throughout the conservation and recreation community.

Fortunately, in December, the U.S. Forest Service released its final Ski Area Clause, thus hopefully ending the saga of the ski areas legislative attempt to rewrite the laws governing the management of water on federal lands.

The Clause was a win for rivers and is substantially similar to the draft Clause published in 2014, other than a few minor tweaks to meet some technical concerns of the ski areas, which American Rivers and our partners did not oppose. But the key framework of the revised clause remains the same: The Service maintains that it has Constitutional and statutory authority to manage water on federal lands and to

include conditions for doing so in special use permits.

Now, the Forest Service is focused on making sure that there is sufficient water available on public lands for the operation of ski areas AND for performing its statutory duty to protect public resources. This win was brought about by American Rivers-led effort on Capitol Hill and within the Administration, by the hard work on the ground by Colorado Basin staff, and by the loud voice of the public who stepped up in defense of places like Denny Creek by sending in 12,731 comments to the Forest Service, which indicated that "more than 12,000" supported the rule.

Like climbing this mountain, achieving these kinds of accomplishments takes effort, strategy, and dedication to making the goal a reality, with the ultimate reward of taking in the view from the top. Experiences like this present a reminder about how vigilant we all must remain in keeping our public lands, and the waters that reside from them and are critical to their health, protected and viable for generations to come.

More than 25,000 spoke out in support of this rule, and as I raise a mug of this (filtered) water to my lips for some refreshment, I want to say "thanks" to each one of you who did. See you at the top!

TICKS

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have developed a process that bonds repellent (a man-made version of the natural repellant found in chrysanthemum flowers) to fabric fibers. The active ingredient is so tightly bonded, repellency effectiveness is retained throughout the expected life of the

garment—that's through at least 70 washings. The repellent in ElimiTick is odorless and invisible. It is the first ever US EPAregistered insect-repellent clothing. Insect Shield repellent products have been rated category IV, which is the most favorable rating. It's been deemed appropriate for use by infants and children of all ages.

Team up multiple repellents, a head net, an ElimiTick suit, and a roll of duck tape, and you've crafted a nearly impenetrable

suit of armor against ticks. But don't forget the vigilance. A nightly tick-check back in camp is a smart idea anyway—just to be sure. I even make these inspections during cold weather seasons if I've been in contact with game animals. Some ticks spend most of the winter riding around on a well-furred host. When you stop the blood flow in that game animal and grab hold for some grip and grin pictures, that's just when that tick is looking for a new home—you!

LAND

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passions. Like so many other companies in the outdoor industry, public lands inspire our products and our customers. The transfer or sale of public lands would deal a blow to our business and America's \$640 billion outdoor recreation economy." "Our public lands access and our outdoor heritage can disappear in this lifetime," said Dan Harrison, big-game expert, co-host of Remington Country TV and owner/partner of Colorado Mountain Adventures. "It is our duty to ensure our future generations have the public lands to carry on our outdoor traditions."

The speakers were united in urging sportsmen to actively oppose efforts to transfer ownership of federal public lands to

Western states - and to stand up on behalf of these iconic lands and waters.

"Public lands are the cornerstone of our outdoor heritage," concluded Harrison. "Our forefathers protected them for us - and now it's our duty to do the same."

Inspired by the legacy of Theodore Roosevelt, the TRCP is a coalition of organizations and grassroots partners working together to preserve the traditions of hunting and fishing.

KID'S WILDLIFE FRIENDS

Is the Easter bunny a rabbit? Or actually a hare?

By eNature

Spring has sprung and Easter is right around the corner. That means the Easter Bunny is on the minds of many children.

And on the minds of many adults is the age-old question.....

Is the Easter Bunny a rabbit or a hare? As many of our readers know, hares and rabbits are cousins. The good news for all candy-lovers is that both are well equipped by nature to handle the tasks that come with being the Easter Bunny.

Rabbit vs. Hare

It's actually the European hare, or brown hare, that holds the impressive credential of being the original Easter Bunny. At least according to a Germanic legend dating back to the 1500s. The ritual of children preparing nests and eagerly anticipating the arrival of Oster Haas (Easter hare), who delivers brightly colored eggs on Easter morning, has taken place in German-speaking countries for centuries.

In the United States the cottontail rabbit has been designated as the official deliverer of Easter treats. This is easily evidenced by the lyrics in popular holiday tunes such as "Peter Cottontail," and the presence of that signature fluffy white behind in every commercial rendition of the Easter Rabbit imaginable.

How are the Easter Hare (brown hare) and the Easter Rabbit (cottontail rabbit) equipped for the daunting tasks associated with their profession?

Let's take a closer look at the unique features of these members of the family Leporidae to find out.

Night Time Is the Right Time

It goes without saying that the job of the Easter Rabbit requires lots of stamina and endurance. This small mammal must accomplish the seemingly impossible task of delivering hundreds of thousands of eggs to children in a single night. Both rabbits and hares are primarily nocturnal creatures, thus able to stay alert and on-task the entire Saturday night prior. Their most productive hours are at dawn and dusk, times of heightened activity and energy for the rabbit and hare. Both species are equipped with large eyes for seeing at night, and their



European Hare

large ears allow them to detect territorial intrusions.

Lickety Split

The forefeet and hindfeet of rabbits and hares have strong claws and a special type of thick hair on the lower surfaces that provides better gripping. Not only does this adaptation aid with running on uneven terrain, it may also allow for the skillful carrying and maneuvering of multiple Easter baskets with minimal slippage (and broken eggs).

With their longer hind legs, European hares have a competitive edge over cottontail rabbits, able to reach a running speed of 50 miles per hour. The agile hare has the speed and skills to outrun and outwit predators. Cottontails move at a swift, but decidedly slower pace than hares, and often rely on surface depressions and burrows to conceal themselves. So far, both the hare and rabbit have managed to elude humans on every Easter Sunday to date—an incredible feat indeed.

Many Wabbits

Though it would completely debunk the theory that there is just one Easter Rabbit, it wouldn't be a stretch of the imagination to assume that egg-delivery is a task shared by a complex, vast network of hundreds, if not thousands of rabbits. There certainly are enough of them to cover all the territory. It's no secret that rabbits and hares are an exceptionally fertile and active lot, often producing dozens of offspring over the course of lifetime.

Newborn hares would most quickly be able to jump on board and help with



Desert Cottontail

Easter tasks. Just minutes after being born, they are fully-furred and able to run around with relative ease. Alternately, newborn rabbits are ill-suited for just about any activity; they are born blind and naked, and require much coddling by their mothers before venturing out in the world.

On the Job Satisfaction

One has to wonder what the glamour and allure in being the Easter Bunny might be. One of the draws may be unlimited quantities food. While children drool over the chocolate eggs and other sweets delivered to them on Easter Sunday, rabbits and hares are no doubt enticed by their favorite edibles—grass and clover—found in many backyards. Perhaps the payoff is the pleasure of seeing the smiles on children's faces when they discover the colorful Easter eggs that have been left for them. Or maybe it is the honor in upholding tradition, year after year.

Whatever the reward or rewards, you've got to commend the Easter Rabbit and the Easter Hare for hundreds of years of excellent service and on a job well done.

Learn how you can help nesting birds

Watching birds at the nest is fun--and fuels bird conservation

Springtime is nesting time, and that means another season of beautiful birdsong, colorful eggs, and downy nestlings. Spring also brings another season of NestWatch, a free citizen-science project from the Cornell Lab of Ornithology. Volunteers have been helping the Lab monitor nesting birds for 50 years, keeping tabs on open-cup nests and actively putting out the welcome mat for species that prefer a cozy cavity.

"Even those who already have birds nesting nearby can support more birds by putting up a nest box, or by landscaping for nesting birds," says NestWatch project leader Robyn Bailey. "Supplying nesting materials, like wool, cotton, or pet fur is another great way to encourage more birds to take up residence."

NestWatch provides an intimate glimpse

into the lives of nesting birds but it is much more. NestWatch data have been used in more than 130 scientific studies, yielding valuable information for scientists and land managers, such as:

- ♦ When, where, and how many eggs are laid by certain species across a wide range
- ♦ How to minimize the effects of forestry and agricultural practices on nesting birds
- ♦ Revealing that some species, such as Tree Swallows and Eastern Bluebirds, are nesting earlier as spring temperatures have risen.

These discoveries and others are made possible by people who simply enjoy watching birds in their backyard or local park.

"I find observing the behavior of the natural world endlessly fascinating," says participant Kate Lowry. "NestWatch offers me the chance to channel my efforts into this more organized method that can provide information to real scientists who, in turn, use the data in their studies."

"Even after five decades there's a lot learn," says Bailey. "For example, data on the Eurasian Collared-Dove, a relative newcomer to North America, remains sketchy. We still don't know how its presence affects our native Mourning Doves, or even how many times they can nest in one year." Scientists need more data to understand how and why species respond differently to large, continent-level changes in the environment.

NestWatch can be a wonderful learning experience for the whole family. Find out more about the project, sign up, and learn how to locate and monitor nests at Nest-Watch.org.

Monsanto sues to keep weed killer off California's list of carcinogens

By Willy Blackmore TakePart

Monsanto has been on the defensive since last year's announcement from the World Health Organization's cancer research arm that its best-selling weed killer glyphosate is "probably carcinogenic to humans." That defense took a new step on Thursday, when the agrichemical giant took legal action in California to halt the state from adding glyphosate to a list of cancer-causing chemicals, based on WHO's findings, under a law known as Proposition 65.

California's Office of Environmental Health Hazard Assessment announced in September that it would add glyphosate to the Prop. 65 list in light of the announcement from WHO's International Agency for Research on Cancer. On Thursday, Monsanto officially took legal issue with that plan, filing a lawsuit against OEHHA and Lauren Zeise, its acting director, in California state court seeking to block the move.

The lawsuit contends that listing glyphosate essentially outsources regulation to an "unelected, undemocratic, unaccountable, and foreign body," Reuters

reported.

However, Prop. 65, which was passed as a ballot initiative in 1986, looks to scientific research, not federal regulators, when deciding what to include on the list. The language of the law itself reads, "State government agencies have failed to provide them [California residents] with adequate protection" from chemicals that can cause cancer or reproductive harm.

That's not to say that Prop. 65 is a perfect system, and any observant California resident is accustomed to coming

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Original Dunstan Chestnuts: The best deer food

From The Archery Wire

Any deer hunter with white oak trees on his or her property knows these acorns are a deer magnet when they rain down to the forest floor in October and November. Imagine a food source so attractive to deer it would cause deer to walk right past white oak acorns. Imagine if that food source would only have to be purchased and planted once, with no maintenance, and then for a century or more would produce high volumes of nutritious forage every year. That food source once existed until disease wiped American chestnut trees from our forests.

Now, Chestnut Hill Nursery is bringing a disease-resistant chestnut, the Dunstan Chestnut tree, back to American forests, and land managers are discovering the ultimate planting for deer and other wildlife. A century ago, the American chestnut was the primary food source tree for forest wildlife. Deer, bear, turkey, squirrel, and hogs all favored this big nut. A Dunstan Chestnut forest can produce 2,000 pounds of mast or more of forage per acre and provide more carbohydrates than an acre of hard-togrow corn, which has to be planted every season and is dependent on rain and environmental factors to even produce. Dunstan Chestnuts are sweet-tasting nuts

that are very high in protein (10 percent) and carbohydrates (40 percent), and they are favored by all wildlife because they have no bitter-tasting tannins like acorns. Field tests by wildlife experts have shown that Dunstan Chestnuts are chosen by deer over all other acorns because of their taste and nutrition.

The Dunstan Chestnut was developed after years of grafting and work by noted plant breeder Dr. Robert Dunstan. The result was a chestnut that is disease resistant, and it produces very heavy annual crops of very large, sweet nuts. Dunstan Chestnuts have been grown all over the United States in Zones 5-9, from Maine to Michigan and Illinois and south to Florida, without any trees ever dying from the blight that eradicated American chestnuts. Dunstan Chestnuts were tested by Dr. James Kroll, known as "Dr. Deer," at the Whitetail Research Institute in Nacogdoches, Texas. Dr. Kroll reported, "Even though the wild deer at this location had never seen a chestnut in many generations, they got on the chestnuts within only an hour after we put them out. The deer ate the chestnuts 100:1 over the acorns! Chestnuts are deer's preferred food."

Dunstan Chestnuts grow quickly and bear nuts in only 3 to 5 years, much sooner than oaks that take 10 to 20 years. Dunstan Chestnuts also have wide soil

adaptability, bear nuts every year unlike most oak species which produce every other year, and they provide excellent production of up to 2,000 pounds or more per acre. The sweet taste of chestnuts even sweetens the meat of the animals that eat it. In Spain, hogs are raised on chestnuts because of the excellent flavored meat it produces, and Estremaduran pork is an international delicacy. Venison from chestnut-fed deer simply tastes better, without the gamey taste of deer that feed on bitter-tasting acorns. Chestnut Hill Outdoors sells Dunstan Chestnut seedlings, packaged for easy planting in root-enhancing containers.

The company also supplies Grow Tubes that keep deer from browsing on the leaves of the young trees and rodents from chewing on the bark. Landowners who want to enhance a food plot with chestnuts should start with at least two trees, because without cross-pollination, a single tree won't produce nuts. Trees should be planted at least 30 feet apart to allow the big trees to grow, but within 100 feet of each other to allow the wind to pollinate them. Trees may be planted in spring or fall. For more information on Dunstan Chestnuts, the original best deer food, visit www.chestnuthilloutdoors.com. Contact Chestnut Hill Outdoors directly to place an order by calling (855) 386-7826.

KID'S WILDLIFE FRIENDS

Have you noticed a duck nesting in a tree?

You've probably just seen a Wood Duck

By eNature

The idea of a duck in a tree may raise some eyebrows. The idea of a duck in the backyard may raise a few more.

Yet there are mallards in backyards across the continent incubating eggs right now. There are also Wood Ducks in backyards, particularly in the East, sitting on eggs—but they're 20 to 30 feet above the ground in tree cavities or duck houses.

A Nest in the Sky

Though Wood Ducks spend most of their lives on water like other ducks, when it comes to nesting, they take to the trees. And the hens are most at home nesting near where they themselves were hatched.

In the spring, a hen Wood Duck leads her beautiful, multi-colored mate back to the place where she was hatched. Together, they explore tree cavities and large birdhouses for a suitable nesting site. The hen then lays an egg a day, for 10 to 12 days, before beginning her incubation of the eggs for another 28 days. Meanwhile, the drake remains attentive, accompanying her on feeding forays twice a day.

That First Step Is A Doozy!

On the day when all the eggs hatch,

the hen coaxes the fuzzy ducklings to jump out of the nest, sometimes from a great height—it's a noisy, dramatic sight! Then she leads her family to water, where they spend the balance of the summer growing up.

Watching a pair of Wood Ducks attend a nest for a month is wonderful, but to witness the ducklings jumping from the nest, two and three at a time, is something else. So keep your eyes up as you watch for ducklings this spring!

Have you seen Wood Ducks in your neck of the woods? Or any other nesting bird pairs?

We always enjoy your stories!

KID'S WILDLIFE FRIENDS

Why do owls bob their heads?

Here's the secret behind the head-turning phenomenon

By Bob Sundstrom Audubon BirdNote

If you were to stand face to face with an owl, after a while it would start to move its head, bobbing rhythmically from side to side, then forward, then back. Or almost completely upside down. All while still looking at you, with its body still facing the front.

Is the owl trying to communicate something? Is this, perhaps, some kind of dance?

All these varied head movements help the owl judge the position and distance of things around it—essentially, to triangulate on objects, including potential prey, and to build a composite picture of its surroundings. This head-bobbing helps make up for an anatomical limitation: An owl's eyes are fixed in position, so they simply can't move the way our eyes do. To look up, down, or to the side, an owl has to move its head. They have very flexible necks and can do 270 degrees of a full head turn, looking

over one shoulder, around the back, and almost over the opposite shoulder. And after a few of these head-bobs to triangulate on their prey, they rarely miss.

It's not only owls that measure the world this way. Most other birds of prey, like falcons and hawks, have the same intent, fixed, predator's eyes, and so they, too, perform their share of head bobs, figuring out what's what and what's where.

To download this podcast, go to bird-note.org.

Study: Birding, hunting boosts conservation action

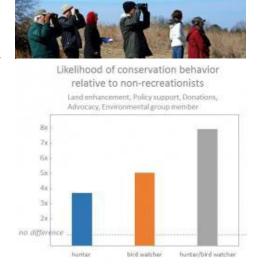
New study reveals strong link between wildlife recreation and conservation

What inspires people to support conservation? As concerns grow about the sustainability of our modern society, this question becomes more important. A new study by researchers at Cornell University provides one simple answer: bird watching and hunting.

This survey of conservation activity among rural landowners in Upstate New York considered a range of possible predictors such as gender, age, education, political ideology, and beliefs about the environment. All other factors being equal, bird watchers are about five times as likely, and hunters about four times as likely, as non-recreationists to engage in wildlife and habitat conservation. Both bird watchers and hunters were more likely than non-recreationists to enhance land for wildlife, donate to conservation organizations, and advocate for wildlife—all actions that significantly impact conservation success.

The contributions of individuals who identified as both bird watchers and hunters were even more pronounced. On average, this group was about eight times more likely than non-recreationists to engage in conservation.

"We set out to study two groups--bird watchers and hunters--and didn't anticipate the importance of those who do both, and wildlife managers probably didn't



either," said Dr. Caren Cooper, the study's lead author, now at North Carolina Museum of Natural Sciences. "We don't even have a proper name for these conservation superstars, other than hunter/bird watchers"

"Managers often discuss direct and indirect links between wildlife recreation and conservation," said study co-author Dr. Lincoln Larson, now at Clemson University. "Our findings not only validate this connection, but reveal the unexpected strength of the conservation-recreation relationship."

The study, published in the Journal of Wildlife Management, speaks to wildlife agency managers. Findings could assuage concerns about diminishing support for conservation in the United States and its historic ties (both socially and economically) to hunting, an activity that has been declining for decades.

"Our results provide hope for wildlife agencies, organizations, and citizens concerned about conservation," offers study co-author Dr. Ashley Dayer of the Cornell Lab of Ornithology. "Bird watchers, a group not traditionally thought of as a constituency by many wildlife management agencies, have real potential to be conservation supporters, if appropriate mechanisms for them to contribute are available."

As agencies and conservation organizations ponder how to better work with bird watchers, hunters, and hunter/bird watchers on conservation, one take-home message is clear: The more time we spend in nature, the more likely we are to protect it.

Are wildlife recreationists conservationists? Linking hunting, birdwatching, and pro-environmental behavior. Caren Cooper, Lincoln Larson, Ashley Dayer, Richard Stedman, and Daniel Decker. Journal of Wildlife Management. 2015. DOI: 10.1002/jwmg.855

The National Wildlife Federation Urges Americans to Stand Up for Wildlife Refuge, Buy a Duck Stamp

By Judith Kohler National Wildlife Federation

As the standoff at Malheur National Wildlife Refuge in Oregon continues, the National Wildlife Federation and its state affiliates are urging Americans to show their support for protecting wildlife habitats and public lands by buying Federal Duck Stamps.

"Whether a hunter, angler, birder, hiker, or wildlife enthusiast, every American benefits from the amazing public lands that have been protected for generations for the benefit of all Americans," said Collin O'Mara, president and chief executive officer of the National Wildlife Federation. "By purchasing Federal Duck Stamps, we can show our strong support for conserving wildlife, enhancing wildlife refuges, and ensuring that America's public lands remain accessible to all Americans."

The Malheur National Wildlife Refuge is home to over 320 species of birds like snow geese and sandhill cranes, 58 species of mammals including mule deer, pronghorn, and bobcats, fish like native redband trout, and amphibians and reptiles such as Western rattlesnakes. Established in 1908 by President Theodore Roosevelt, the Refuge spans 187,000 acres (292 square miles) and is home to one of the largest freshwater marsh ecosystems in the western United States.

The occupation of the Malheur National Wildlife Refuge follows multiple unsuccessful state-level and Congressional efforts to privatize public lands, which are currently accessible to all Americans. These efforts have failed to gain traction in state legislatures across the West because, according to research by Colorado College, more than 95 percent of Western voters support keeping

public lands in public hands.

"Our fishing and hunting privileges are carried by our investment in habitat. Investments in conservation programs such as the duck stamp only serve to grow our opportunities for sportsmen and women and now is the time to financially demonstrate the value of our wildlife refuges," said Bob Rees, executive director of the Association of Northwest Steelheaders, the National Wildlife Federation's Oregon state affiliate.

Duck Stamps were created in 1934 after President Franklin Delano Roosevelt signed the Migratory Bird Hunting Stamp Act into law. The first stamp was illustrated by Jay Norwood "Ding" Darling, Director of the Biologic Survey (precursor to the U.S. Fish and Wildlife Service), founder of the National Wildlife Federation, and famed political cartoonist. Since Darling's time, the importance of conserving habitat and wildlife has only grown, as our population and the demands on our lands and resources have grown.

Today, ninety-eight cents of every dollar spent on Federal Duck Stamps go directly to purchase vital habitat or acquire conservation easements for protection in the National Wildlife Refuge System, according to the U.S. Fish and Wildlife Service. Every duck hunter in the U.S. must buy one every year as a contribution to wildlife conservation in America and other outdoor enthusiasts buy them to support wildlife and habitat. You can buy a Federal Duck Stamp at National Wildlife Refuges, select post offices, and many major sporting goods stores, or buy an Electronic Duck Stamp online.

Since 1934, more than 300 national wildlife refuges, including at least one in every state, were created or have been expanded using Federal Duck Stamp revenue, totaling more than 6.5 million acres. "America's National Wildlife Refuges support birds and other wildlife across North America, prized by the millions of hunters, birdwatchers, anglers, hikers and other outdoor enthusiasts, fueling local economies and drawing visitors from around the world," said Dave Chadwick, executive director of the Montana Wildlife Federation, the National Wildlife Federation's Montana affiliate. "Buying a Federal Duck Stamp is one simple but meaningful way we can show our support for keeping public lands in public hands."

Sportsmen and women nationwide are speaking out for the importance of public lands and wildlife.

"National Wildlife Refuges are the cornerstone of public lands and wildlife conservation in America," said Tim Gestwicki, CEO of the North Carolina Wildlife Federation, the National Wildlife Federation's North Carolina affiliate. "The duck stamps that we sportsmen and wildlife enthusiasts purchase give us access to the public lands we cherish. And right now it's prime duck hunting and peak migratory bird observations, so we value these special places that belong to all citizens all the more."

National Wildlife Federation state affiliates are urging Americans to show their support for our national wildlife refuge system by buying Federal Duck Stamps.

"The vast majority of Americans highly value and support our public lands. Our national refuge system and other public lands are so vital to our wildlife, places that also contribute to our own wellbeing. This program is a great way to show your support. Buy a Duck Stamp," said Chamois Andersen, executive director of the Wyoming Wildlife Federation, the National Wildlife Federation's Wyoming affiliate.

MONSANTO

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across signs that read "WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm" throughout daily life. If you're driving into a parking garage, pumping gas, buying aspirin, or shopping for Chinese-style salted fish, there's likely a warning posted

somewhere. Some 900 chemicals are listed under Prop. 65. Even bacon, which the IARC also recently declared a carcinogen, could soon be labeled.

"Generally speaking, the lead agency in California takes the position that if IARC has listed a chemical as a human carcinogen, it has to be added to the Proposition 65 list," Bruce Nye, a defense attorney who works with companies on Prop. 65 cases, told Capital Public Radio last year.

Apparently, that precedent did not factor into Monsanto's legal calculations, which is not all that surprising—the com-

pany has vehemently defended glyphosate, which it sells under the brand name Roundup, against the IARC declaration.

"The IARC classification of glyphosate is inconsistent with the findings of regulatory bodies in the United States and around the world, and it is not a sound basis for any regulatory action," Phil Miller, Monsanto's vice president of regulatory affairs, told Reuters. One such finding could make California look hypocritical here: The OEHHA concluded in 2007 that glyphosate did not present a cancer risk.

The surprising way birds are trying to dodge climate change

New research shows that some birds are moving faster than ever to keep up with shifting climates. Here's where they're going.

By Purbita Saha Audubon

We humans have our ways of coping with climate change: We'll put down sandbags, escape pods, and even heat siphons to keep our homes from slipping away. But what about birds? How are they surviving bizarre rain patterns, extreme temperatures, and freak weather events?

Brooke Bateman has the answer to that. The post-doctorate ecologist from the University of Wisconsin, who once deciphered movements of Australian animals, wanted to figure out how breeding birds in North America were dealing with the havoc brought on by climate change. "How far and fast is climate change happening... that's what I needed to know," she says. With the help of scientists from Wisconsin and Australia, Bateman wove together climate data with location data for 285 North American species, and built models to show how rainfall,

temperature, weather, and other variables affected every species' distribution for every month of every breeding season from 1950 to 2011. ("I made a lot of models," Bateman says.) Using the models as a reference, she then drew predictions on where the birds are ending up. The final results were published in Global Change Biology in December.

What do the models reveal?

There are two major curveballs in this study: First, birds are moving faster than we think, and second, they're going places where we don't suspect. Previous estimates had breeding ranges shifting by an average of .4 miles a year, but Bateman's work proves that some species are moving at twice that speed, up to as much as 3 miles a year. The quickest drifters include meat eaters, insect eaters, and species that forage high up in the canopy or at the bottom of the forest floor (they're probably stalking their prey to new spaces). Birds that are staying put include woodpeckers, hummingbirds, plant eaters,

and non-migrants.

The direction of these movements is also unexpected. While the majority of the species are flying northward (as predicted), more than a quarter of them are creeping westward—specifically to Wisconsin, Minnesota, Iowa, and South Dakota. The Tufted Titmouse, for example, is expanding into the Midwest and finding its niche in humandominated landscapes. Hooded Warblers are moving in that direction as well, but they're more used to living in the thick forest understory, so adapting to the grasslands and wide-open plains will be a lot more difficult for them.

How does this study fit in with other related research?

In the continued saga of birds and climate change, findings like these can "help to complete the story," Gary Langham, Audubon's chief scientist, says. While the Audubon

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U.S. Senate committee approves top sportsmen's priorities

Sportsmen contacts needed ASAP

By Sportsmen's Alliance

On Jan. 20, the U.S. Senate's Environment and Public Works Committee approved a bill containing some of the top priorities of the hunting and fishing community.

S. 659, the second half of the Bipartisan Sportsmen's Act of 2016, includes a key provision sponsored by Sen. John Barrasso (R- Montana) directing the U.S. Fish and Wildlife Service to remove gray wolves from the Endangered Species List. Despite greatly exceeding population targets for delisting, anti-hunting groups successfully persuaded a federal judge to keep wolves protected. The amendment returning wolves to the state management, which has been advocated for and supported by the Alliance, passed on a voice vote.

The committee also rejected an attempt by Sen. Barbara Boxer (D-California) that would have stripped language preventing the EPA from regulating lead in ammunition. Ammunition for hunting is already regulated at the state level, and by the Fish and Wildlife Service where appropriate. The amendment was defeated 9-11. Sen. Boxer also tried to remove language allowing polar bear trophies that were taken prior to their listing on the Endangered Species List from being brought into the United States. The amendment was rejected by the same 9-11 margin.

"This moves us one step closer to passage of the Sportsmen's Act," said Evan Heusinkveld, Sportsmen's Alliance interim president and CEO. "These bills include the most critical items for the hunting and conservation community. This is not a Republican or Democrat issue. It's a hunting and conservation issue. We're hopeful that the Senate will look past partisan differences and take up the full package in the near future."

Sen. Cory Booker (D- New Jersey), also threatened to include a ban on trapping on the 150-million-acre National Wildlife Refuge System, but failed to attract support and ultimately withdrew the amendment.

The Senate will now take up the entire package. Included is a major priority of the Sportsmen's Alliance known as "Open Until Closed." For decades, anti-hunting organizations have used the courts to block the opening of public lands that could, and should be, open to hunting. Language in the Sportsmen's Act would mandate that federal public Bureau of Land Management and Forest Service Lands be open to hunting unless federal wildlife managers find cause to close them. The language will protect hunting and increase hunting access on millions of acres of public land.

Sen. Boxer, a regular opponent of prohunting measures, committed to publicly fight the Bipartisan Sportsmen's Act on the floor, and is seeking to organize a filibuster. Sportsmen calls are needed immediately.

Take Action: Call both Senator Roberts ((202) 224-4774) and Senator Moran ((202) 224-6521) today. Ask them to support the Bipartisan Sportsmen's Act.

Bye-bye, birdie

How this threatened species became a flashpoint in the \$1.1 trillion spending bill.

By Alex Guillen and Elana Schor Politico

Before lawmakers could agree to a \$1.1 trillion, last-minute deal to avoid shutting down the U.S. government, they first had to deal with a couple of birds.

The result is a 1,603-page spending bill that includes a paragraph barring the Obama administration from approving endangered-species protections for two types of sage grouse, an imperiled, pheasant-like bird that is ruffling the petroleum industry's feathers across the West by cohabiting on prime oil and gas land.

Now environmentalists are squawking. The grouse provision is "grossly irresponsible," Defenders of Wildlife CEO Jamie Rappaport Clark said Tuesday, while Randi Spivak of the Center for Biological Diversity called the legislation a "death warrant" for a bird whose noisy, elaborate mating rituals attract tourists to so-called sagebrush safaris. National Audubon Society Vice President Brian Rutledge called it "political chicanery."

But with the government due to run out of money at midnight Thursday, the fate of the greater sage-grouse and Gunnison sage-grouse probably won't be the deciding factor on whether Congress passes the deal or President Barack Obama signs it. Instead, the humble bird is just another example of how Washington gets business done, with industry, environmentalists, pro- and anti-regulation advocates and lawmakers from both parties trading chits on issues like school nutrition, sleep rules for truckers and D.C.'s marijuana laws.

With this fight, the sage grouse has joined a roster of creatures like the spotted owl, the snail darter and the Delta smelt in becoming flash points for Beltway collisions between conservation and business interests.

The oil and gas industry's supporters, who include both Republicans and Democrats, say they just wanted to keep the Interior Department from acting on grouse protections before all sides can agree to a solution. By blocking the grouse safeguards, the measure will "make sure that there is ample time to discuss it and get to a good solution," Sen. John Hoeven (R-N.D) said.

Congress stepped in "to delay an arbitrary listing deadline and give more time for state and local conservation efforts to show their effectiveness," Western Energy Alliance spokeswoman Kathleen Sgamma said by email.

Oil and gas companies, along with



AP photo

farming, forestry and recreation interests, are wary of federal grouse protections that they warn could short-circuit states' more development-friendly habitat safeguards. State-based plans "provide more certainty to oil and natural gas producers, rather than the one-size-fits-all approach that the federal government is on a path to impose," Sgamma said.

Just this week, drillers' fears about potential sage-grouse protections caused bidders to stay away from a federal sale of oil and gas leases in Nevada, The Associated Press reported. Interior's Bureau of Land Management sold just one parcel out of 97 offered.

"As we've seen just this week with the low-yielding BLM lease sale in Nevada, independent producers are concerned that a future federal listing of the sage-grouse would harm existing state-based conservation measures already in place to protect the bird, while simultaneously ignoring the great strides America's energy industry has taken to reduce surface impacts and enhance conservation of the sage-grouse in the West," Dan Naatz of the Independent Petroleum Association of America said in a statement.

But conservationists like Audubon's Rutledge accused lawmakers of "ignoring scientific input" about the plight of the birds, which have seen their range dwindle as development expands across the region. Only about 5,000 breeding Gunnison sage-grouses still exist, Interior's Fish and Wildlife Service says, while the greater sage-grouse has a population between 200,000 to 500,000.

"We need to be working towards a solution now to recover the sage grouse instead of kicking this issue down the road," said Nidhi Thakar, the Center for American Progress' deputy director for public lands. "Time is of the essence to reverse the decline of this important species that plays a critical role in the Western ecosystem."

Among green groups, only the Environmental Defense Fund stopped short of condemning the rider, saying it means Western states must act aggressively and quickly on conservation measures.

Interior Department spokeswoman Jessica Kershaw criticized Congress' intervention but said the agency will continue trying to come up with an agreement to save the species while accommodating other interests.

"The rider demonstrates that House Republicans are more interested in kicking the can down the road than finding solutions to conserve the sagebrush landscape and the Western way of life," Kershaw said by email. "The Interior Department remains optimistic that conservation measures can be implemented to avoid the need to list the Greater sage-grouse, and the rider will not stop the unprecedented collaboration happening across 11 Western states."

Despite the rider, an Interior official said, the spending deal includes money for the agency to work with the Agriculture Department to conserve sage-grouse habitat, and the Fish and Wildlife Service "will continue to collect data and conduct analysis to reach a final decision. The rider has no effect on developing state and federal plans, or building partnerships to incentivize conservation."

One Senate Democratic staffer turned lobbyist complained that the administration "didn't do as much as they could have done"

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'Overreach' on sage-grouse? Hardly.

By Clait E. Braun The Denver Post OPINION

This headline should have read: "U.S. Fish & Wildlife Service has underreached on Gunnison sage-grouse."

The writer calls the local effort to save habitat for the Gunnison sage-grouse "highly successful," which is far from the truth. Any time local subpopulations outside of the Gunnison Basin become functionally extirpated and are being managed from the back of a truck via releases of birds transplanted from the Gunnison Basin is not a time for complacency.

Further, the suggestion by political sage-grouse czar for Colorado, John Swartout, that Colorado should not be concerned "about much smaller satellite populations" in Dolores, Rio Grande and San Miguel counties misses the point about the importance of maintaining all genetic material, as all of it will be necessary if Gunnison sage-grouse are to persist.

There are no Gunnison sage-grouse in Rio Grande County, and they have not been since at least the early 1940s, if then. However, small populations of Gunnison sage-grouse disappeared from Eagle, Garfield, Montezuma and Ouray counties in the 1990s. This pattern is being repeated.

The U.S. Fish & Wildlife Service has known since at least 1995 what was happening to Gunnison sage-grouse, as I personally took their endangered species biologist to Dove Creek in Dolores County



Gunnison sage-grouse males display their filoplumes (topknot), bulging air sacs, white breasts and spiky tail feathers in 2007. (Denver Post file)

and Miramonte Reservoir and Dry Creek Basin in San Miguel County to show him the problems. This federal agency has repeatedly underreached and delayed listing protection for about 20 years for Gunnison sage-grouse. The Colorado Division of Parks and Wildlife (then Division of Wildlife) has also underreached and repeatedly questioned if the Gunnison sage-grouse was a separate species.

Overreached? Hardly. The federal land management agencies, U.S. Fish &

Wildlife Service, and private landowners have had about 20 years to get on board. It is now doubtful if Gunnison sage-grouse will persist for the next 20 years.

Re: "Overreach on the Gunnison sagegrouse," Nov. 9 Vincent Carroll column.

Clait E. Braun is a retired avian research program manager with the Colorado Division of Wildlife. Editor's note: Last week, the federal government declared the Gunnison sage-grouse officially threatened under the Endangered Species Act.

GROUSE

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to stop the grouse rider, describing a "sense of concern and frustration" with Interior among green and sportsmen's groups. The lobbyist said the administration's apparent reluctance to engage this week as Republicans pushed the rider "begs the question of whether someone had already signed off on this language higher up in the White House."

Interior is under a court deadline to decide by September about an Endangered Species Act listing for the greater sage-grouse, and last month it settled on a status of "threatened" for the Gunnison sage-grouse. Gov. John Hickenlooper (D-Colo.), whose state is a growing oil and gas

producer, has vowed to sue over the latter decision.

Interior Secretary Sally Jewell told the Western Governors Association last weekend that she hopes to work with states and other groups to create strong enough conservation measures to avoid listing the greater sage-grouse. But the fact that the spending deal expires Sept. 30, close to Interior's court deadline, "could put this thing right back in the courts," the lobbyist said

Both the Gunnison and greater grouse are about the size of chickens and have striking speckled tail plumage. The sage grouse is known for a mating ritual in which males pop curvaceous air sacs with a ziplike sound that can be heard two miles away.

The birds' finicky nature presents significant challenges to locals who have taken major steps to avoid disturbing them.

Among other accommodations people have made for the birds, developers have changed the direction of bathroom windows on new homes because the predawn light would upset mating dances.

One lawmaker interested in the issue is Sen.-elect Cory Gardner (R-Colo.), who signed on to House legislation this year that would block endangered-species listings of the sage grouse for 10 years but require states to develop conservation plans.

He said he has spoken to Interior about the issue but not in recent weeks. "I have not heard from Secretary Jewell directly on whether or not they are pushing quietly behind the scenes for some kind of legislative action," Gardner said before the spending bill was released. "I certainly would support efforts to do everything we can to prevent any kind of economically devastating actions from occurring."

Grouse needs 3-mile buffer from drilling

By Matthew Brown Yahoo!News

A government report with significant implications for the U.S. energy industry says a struggling bird species needs a 3-mile buffer between its breeding grounds and oil and gas drilling, wind farms and solar projects.

The study comes as the Obama administration weighs new protections for the greater sage grouse. The ground-dwelling, chicken-sized birds range across 11 western states and two Canadian provinces.

A 3-mile buffer for the birds represents a much larger area than the no-occupancy zones where drilling and other activity is prohibited under some state and federal land management plans.

However, those plans also contain more nuanced provisions, which backers say will protect sage grouse, such as seasonal restrictions on drilling or other activity and limits on the number of oil and gas wells within key sage grouse habitat.

Some wildlife advocates say too much energy development is being allowed, undermining efforts to help grouse. Such opposition could be bolstered by a recent U.S. Geological Survey report.

The USGS made no management recommendations, and agency scientists said the buffer distances were for guidance only.

Greater sage grouse populations dropped sharply in recent decades due to disease, pressure from the energy industry, wildfires and other factors.

Now state and federal officials are scrambling to come up with conservation measures to protect the grouse ahead of a court-ordered September 2015 decision on protections.

A related bird, the Gunnison sage grouse of Utah and Colorado, received federal protection as a threatened species on Nov. 12. An adviser for Colorado Gov. John Hickenlooper said that the state plans to challenge the decision in court.

The USGS report on the more-common greater sage grouse represents a compilation of scientific studies aimed at seeing what it takes to protect the bird.

It was requested by the U.S. Department of Interior's Bureau of Land Management, which oversees millions of



This July, 28, 2014 photo provided by the U.S. Fish and Wildlife Service shows a Greater Sage Grouse.



acres of sage grouse habitat and regulates the energy industry across much of the West.

BLM spokesman Jeff Krauss said the agency will use the new information as it works on changes to land use plans that include new sage grouse conservation measures.

The report said a minimum buffer extending to a 3.1-mile radius around sage grouse breeding sites would provide considerable protections for the bird. That radius would equal a circle around the leks covering 30 square miles.

The report suggests a maximum buffer of 5 miles.

By comparison, Montana and Wyoming have adopted management plans for the bird that call for a no-surface occupancy zone of six-tenths of a mile around breeding sites, or leks, in key sage grouse habitat. That's an area of slightly more than one square mile.

The state plans also limit human activity within a larger area around breeding and nesting seasons. And they take into account cumulative impacts, such

as a restriction in Wyoming that limits oil companies to one well pad per square mile in key habitat. That keeps sage grouse habitat intact, Wyoming Petroleum Association Vice President Esther Wagner said.

"That reduces (habitat) fragmentation, which is what it all comes down to," Wagner said. "It's working here."

But Steve Holmer, a senior policy adviser for the American Bird Conservancy, said larger no occupancy areas around leks are needed if sage grouse populations are to survive.

"There really needs to be a hard and fast rule about no occupancy," he said. "When it comes to oil and gas, those have been found to immediately drive out leks if they're too close."

The U.S. Fish and Wildlife has determined that Wyoming's sage grouse plan — used as a template for Montana's — is protective of the bird, agency spokesman Theodore Stein said.

Krauss, the BLM spokesman, pointed out that the report offered a range of buffer distances. "There is no single number for an appropriate buffer distance for any particular type of disturbance," he said.

Land managers also need to take into consideration local conditions across the grouse's sprawling, 257,000-square-mile habitat, USGS senior science adviser Carol Schuler said. The buffer recommendation was meant to offer a reference point as more localized decisions are made, she said.

KID'S WILDLIFE FRIENDS

Ever see a dancing Prairie-chicken?

By eNature

Dancing With The Stars is kicking off of a new season on the television.

Too bad they're not including one of America's best dancers—the Prairie-chicken! This bird's courtship performance is the sort nature documentaries love to feature.

While it lacks the exotic locales often required to attract finicky viewers, and the animals, well, they're, prairie-chickens, it's unfortunate that few people expect a bunch of chickens to elicit much excitement...

But the thrills are real, and North America's prairies will offer plenty of them during the next few months. The key is finding the right spot and getting there very early in the morning.

What Is A Prairie-chicken?

Prairie-chickens are native game birds of North America. There are two kinds of prairie-chicken, and both are chunky, brown, chicken-like prairie natives. The Greater Prairie-chicken is the larger of the two varieties and has a broader range, encompassing eleven Midwestern and Plains states.

Whereas Greater Prairie-chickens prefer tallgrass prairies, Lesser Prairie-chickens choose a shortgrass prairie habitat. Once rather widespread, Lesser Prairie-chickens now exist only in northern Texas, western Oklahoma, western Kansas, and southeastern Colorado.

Prairie-chickens are sometimes called arena birds. Arena birds can be found all

They're pretty good dancers!



Lesser Prairie Chicken, displaying male



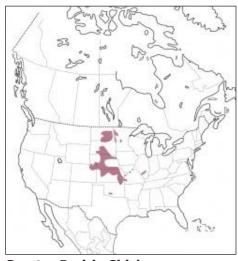
Lesser Prairie Chicken, range

over the world. What earns them that name is the tendency of males to pick out a spe-

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Greater Prairie Chicken, displaying male



Greater Prairie Chicken, range

CLIMATE

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Birds and Climate Change Report (released in 2014) predicts how breeding and wintering ranges may shift and shrink over the next century, Bateman's models take a deeper look at what's causing the birds to relocate right now. And the snapshots from the past 60 years show that birds are already moving thanks to global warming. The responses, Langham says, are idiosyncratic: The birds aren't just moving northward, and they're not all magically adapting to their new surroundings.

The study's present-day, species-specific approach is also important because it highlights which birds need the most help. For instance, Bateman's models show that

the Florida Scrub-Jay's thin slice of habitat is being squeezed even more tightly. The Audubon Climate Report's models point out that there will be other climate-suitable patches in California for these birds; but the jays probably won't be able to find their way out there, Langham says. So rather than leaving species to adjust—or go extinct—on their own, humans will have to step in and give them a hand, by slowing down the pace of climate change and preserving critical landscapes.

Why is this helpful for conservation?

In Bateman's perspective, birds have three options: They can move, stay and adapt, or stay and be wiped out. Knowing which option a species will choose can help conservation groups, like the U.S. Fish and Wildlife Service (one of Bateman's collaborators), pick out a rescue strategy. "We can put our

money in places that have multiple species, and build connectivity between where the birds are and where they will be," Bateman says. Unfortunately, birds and people tend to love the same landscapes: In the study, areas that gained the most species were also hot spots for development. Saving these lands through acquisition is crucial, Bateman says.

The study also offers some foresight on which spaces need to be preserved for current and future generations of birds. Survival isn't the only thing species have to worry about when moving to a new breeding spot: "The big question is, can they create the next successful generation there?" Langham says. If they can't, humans might need to step in. "Heroic efforts [by people] could buy at least 10 more generations of birds," Langham says, "and that could be the difference in them being around."

Creating a bird-friendly yard

New research shows that small habitats can add up to a big difference.

By Rene Ebersole Audubon Magazine

We love our lawns. In the United States more than 45 million acres—an area eight times the size of New Jersey—are carpeted with them. And we're adding 500 square miles of turfgrass every year. Maintaining all that lawn is a huge undertaking and, for many, a source of personal pride. Annually, the average U.S. homeowner spends the equivalent of at least a full workweek pushing or driving a mower

You could say the quest for perfect lawns—richly green, closely cropped, weedless, and insect-free—is almost as American as baseball. But this national preoccupation comes at a cost. Consider how many gallons of water and pounds of pesticides it takes to keep lawns lush. Depending on the conditions, a 25-by-40-foot yard can drink 10,000 gallons of water in a summer. Lawn care accounts for 70 million pounds of pesticides applied in the United States each year, 10 times more than even what is used in farming. The toxic runoff percolates into groundwater, threatening wildlife and human health.

What you get is a cookie-cutter land-scape whether you're in Palo Alto, Houston, Cincinnati, New York, or Phoenix. "All around the country you can find the same few species of grasses and foundation shrubs making up a national, undifferentiated residential landscape," writes Pam Penick in her new book Lawn Gone!. "It's like driving cross-country on the interstate and seeing the same four fast-food restaurants at every exit."

And wherever green grass grows there was once habitat—a forest, prairie, wetland, or even a desert. Which is why many gardeners concerned about disappearing wilderness and wildlife declines are trying to grow the habitat back. With support from conservation groups like Audubon—or just for the love of it—they are digging up their yards and replacing the grass with trees, shrubs, and flowering plants that can again provide birds and other wildlife with food, clean water, shelter, and places to nest. Their spadework is unquestionably restoring varied and colorful homes where chickadees can sing and butterflies can flutter. But until recently few scientists could say for sure whether such efforts are having a meaningful impact on wildlife. Now they are

finding proof that even small habitats can make a big difference.

In 2000, when Doug Tallamy bought 10 acres of former farmland near Oxford in southeastern Pennsylvania, one mile from the Maryland border, he wasn't looking for a new research laboratory. He simply wanted a pleasant place to live with his wife, Cindy, and a reasonable commute to the University of Delaware, where he has now worked for 32 years as an entomology professor. The property, once mowed for hay, was overrun with unwelcome plants. "Autumn olive and oriental bittersweet, Japanese honeysuckle, bush honeysuckle, and multiflora rose—the whole gang was there," he says.

The exotic plants (nearly all from Asia) overwhelmed most of the landscape. He bought a sturdy pair of hand loppers to cut through the thorns, including autumn olive's thick, inch-long spikes. Eventually, he could take a walk without injury.

Soon he noticed something else disturbing. Most of those nonnative plants had little to no leaf damage from insects, unlike the indigenous maples, oaks, cherries, willows, and black gums, which were being eaten as usual. He was concerned. Was he witnessing a troubling consequence of the exotic plants that are spreading everywhere? If insects that spent millions of years eating native plants passed up a buffet of aliens—because they either couldn't or wouldn't eat them—did that mean areas dominated by foreign plants would support fewer insects? And if the insect populations plummeted, would birds starve?

Tallamy did an exhaustive search of the scientific literature to see whether he could find answers to those questions, but there was almost nothing. So he began studying how throngs of proliferating exotic plants are affecting insect populations and, therefore, the birds that eat them.

Healthy bird communities are inextricably linked to healthy insect populations. Ninety-six percent of terrestrial North American birds raise their young on insects. And not just any insects. Mostly caterpillars. Rich in fat and protein, caterpillars are essential for a bird trying to keep up with the demands of a hungry family. Consider the Carolina chickadee. It takes 390 to 570 caterpillars a day to feed a growing clutch of four to six chickadees in the 16 days from when they hatch to when they fledge from their nest. "That can be more than 9,000 caterpillars

to make one batch of chickadees," says Tallamy. "We know they're not flying five miles down the road to forage. We know that almost all of a chickadee's foraging happens within 50 meters [164 feet] of the nest. That's why you need so many [caterpillars] in your yard."

One of Tallamy's studies examined the moth and butterfly larvae that develop on indigenous and exotic plants in the mid-Atlantic region (Virginia, Maryland, Delaware, Pennsylvania, New York, New Jersey, Connecticut, and Rhode Island), where you can find roughly 3,000 of the country's total of 11,500 caterpillar species. From his findings he created a ranking system of regional trees and plants by the abundance and diversity of caterpillars they can host. First place on the top 20 list went to the oaks, which supported 534 species of caterpillars. Second place went to cherries and plums, which were home to 456; willows came in third, with 455.

The study confirmed Tallamy's suspicions that gardeners could play a pivotal role in creating safe havens for wildlife. (An estimated 85 percent of invasive woody plants spreading through wild areas originally escaped from home gardens.) Thus he opens his landmark book, Bringing Nature Home, with a call to action: "For the first time in its history, gardening has taken on a role that transcends the needs of the gardener. Like it or not, gardeners have become important players in the management of our nation's wildlife. It is now within the power of individual gardeners to do something that we all dream of doing: to make a difference. In this case, the 'difference' will be to the future of biodiversity, to the native plants and animals of North America and the ecosystems that sustain them."

Many gardeners and botanists regard Tallamy's book as the seminal source, and sales remain strong—the paperback is in its seventh printing. Throughout it, Tallamy avoids the term backyard habitat, because he says "it implies that these are so terrible we have to hide them in the backyard. When in fact the front yard is fair game. We're not talking about creating ugly landscapes. A beautiful oak tree in your front yard is a highly functional plant there."

Homeowners who landscape with native trees and plants such as oaks, golden-

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rods, asters, cherry trees, and sunflowers are planting bird food factories that ship caterpillars in bulk, and make regular deliveries of fruits and seeds that help fuel bird migrations over thousands of miles and multiple continents. "The plants in our yards are just as effective as the bird feeder you put up in wintertime," Tallamy says, "because the plants are making the food that feeds the birds in the summertime."

For a bird searching for a nice place to raise a family, the classic suburban yard—a tidy bed of grass, one or two shade trees, and a row of leafy foundation plantings imported from China—must be like a foreclosed fixer-upper in a bad neighborhood. The accommodations are spare and all the local restaurants are dives.

The nice neighborhoods, on the other hand, where native plants abound, offer all the perks of a Park Avenue suite with a stocked pantry and a view. There is abundant food, places to nest, and a brilliant stage upon which a bird can sing without competing against the din of a lawn mower.

One of Tallamy's undergraduate students, Karin Burghardt, compared two such types of landscapes in southeastern Pennsylvania. One property in each of six pairs had a higher proportion of native plants, and the other was more typically suburban, with an indigenous tree canopy casting shadows on lawns fringed by alien ornamental bushes and ground covers like pachysandra.

Not surprisingly Burghardt found a greater diversity and abundance of birds and caterpillars in the yards filled with naturally occurring plants. But one finding blew the researchers away. Birds of conservation concern in the area where the study was done—wood thrushes,

eastern towhees, veeries, and scarlet tanagers—were eight times more abundant and significantly more diverse on those parcels. "There was a big jump in their ability to use these properties," says Tallamy.

During the three months it took Burghardt to gather data, 125 square miles of lawn grew across the country, even in areas where you wouldn't expect to find grass growing. In Phoenix, Arizona, where temperatures can hit 120 degrees Fahrenheit, the popular garden "oasis" is a mix of turf, subtropical palm trees, and a scattering of desert-adapted plants. Susannah Lerman, a researcher from the University of Massachusetts-Amherst, traveled there to examine the difference between how birds use the "oasis" compared to grounds brimming with native desert plants (a gardening style known as xeriscaping; see "Hollywood Native.").

The well-watered oasis yards were ruled by grackles, house sparrows, and European starlings—everyday birds that wouldn't normally survive in such a hot and dry place. "You're not going to see those species naturally in the desert because they can't make it without water," she says. "But as soon as you add water—boom."

On the properties most closely resembling the arid desert surroundings, she found Gila woodpeckers nesting in saguaro cactuses, Anna's hummingbirds sipping nectar from mesquite, and curvebilled thrashers nesting in cholla cactuses. She also discovered that the birds frequenting those xeriscaped properties were staying longer and eating until they were full. "They didn't have to keep moving around, which takes a lot of energy," she says. "They could stay in one patch and do all of their activities. If you're a bird that doesn't have to fly from yard to yard desperately trying to find food, you can go off and do other important things, like attracting a mate or feeding your young.'

Lerman worries about one potential hazard of creating a bird retreat in a desert

of grass and pavement. In the right set of circumstances it could become a Bates Motel. "We have to be really careful that when we do create these habitats we don't create ecological traps." (This refers to the inadvertent bait and switch that can happen when wildlife is drawn to an area that ultimately jeopardizes its safety.) "If you create a wildlife habitat, and then you have a cat outside, it's completely unproductive. You're attracting all these birds to your yard with beautiful plants, and your cat is waiting to kill them."

It doesn't have to be your cat either. It could be a neighbor's or a feral one. In fact, a recent study by scientists at the Smithsonian Conservation Biology Institute reported that between 1.4 billion and 3.7 billion birds are killed each year by cats roaming outdoors. "This is a huge and complicated issue," Lerman says, "because you can't control other people's behavior."

While cutting-edge research is expanding scientists' understanding of how people can support birds and other wild-life—one garden, schoolyard, and urban park at a time—there is still a lot to learn. "Prior to this research, it was largely suspected that backyard habitats could be helpful in providing sanctuary to birds during nesting and migration," says Steve Kress, Audubon's vice president for bird conservation and author of The Audubon Society Guide to Attracting Birds. "Their research gives us solid information that shows how important the native plants are."

But he emphasizes that selecting plants that host the insects birds eat is only part of the equation. Fruiting plants and seeds fuel birds during migration, and are thus equally essential in any habitat. "Of course, plants should also be selected for other features than food, such as shelter during extreme weather and usefulness for nesting structure. Just as some plants sus-

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CHICKEN

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cial area, or arena, in which to display for interested females.

What The Heck Is A Lek?

In the case of prairie-chickens, the males arrive at their arenas just before sunrise. The arenas, also called leks, look no different to humans than the rest of the prairie — that

is, until a female or two glides or struts onto the scene, and the males start trying to impress.

At that point, to a high-school dance Bending forward and raising their tail feathers and the special dark feathers near their heads, the male prairie chickens then inflate the air sacs along their throats (orange in the Greater and pink or purplish in the Lesser). From these sacs the birds let out great booming calls, which resonate across the early morning prairie lands. "Ooo-loo-loo, ohh-loo-loo" echoes from all around as the suitors serenade females. To top off the performance, the anxious males rapidly stamp the ground as they call, thus creating a strange song-and-dance routine.

It's quite a site and puts most other courting rituals, even high-school Prom Night, to shame.

Are you seeing any courting rituals among the birds in your neighborhood?

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tain diverse caterpillar populations, others provide good options for nesting structure and safety from predators."

Nest boxes hung on posts or standing trees are another key feature, he says, because people tend to remove downed trees and other structures with cavities that birds would use naturally. In addition, birds need sitting perches where they can keep an eye out for predators; a place to get out of the sun on a hot day or to weather a winter storm; water for drinking and bathing; and even some thorny shrubs like hawthorns that can provide a fortress against prowling animals, including cats.

At the same time scientists are taking a hard look at nonnative invasive species that provide birds with food but also harm the ecosystem. Porcelainberry is firmly on the National Park Service's "least wanted list" for its habit of forcefully twining through woodlands and smothering native plants. But apparently the birds aren't too picky. "[They] eat porcelainberries up the wazoo," says Michelle Frankel, a conservation biologist who is leading Audubon's Bird-Friendly Communities initiative in the Atlantic Flyway. Some people think: Why make such a fuss. Just leave it. But Frankel says you have to also consider the plants that porcelainberry displaces. What's more, not all plants are created equal. A recent study revealed that the highest fat content and energy densities in fruits that migrant birds ate at two field sites in Rochester, New York, came from native shrubs—not the aliens. The birds were choosing the higher-octane fuel and eating it more voraciously.

More and more, citizen science projects continue to deepen our understanding. Two such programs were launched this spring. "These initiatives are designed to look more closely at bird and plant associations and answer some of the questions, particularly having to do with backyard habitats," says Frankel.

YardMap is a Cornell Laboratory of Ornithology project that encourages people to gather data about the habitats that they are most familiar with—their yard, their favorite birding spot, a schoolyard, even a cemetery—to provide insights about how they can aid wildlife. The program is like Google Earth, allowing users to zoom in on their place and mark the types of plants that exist there. "It's connected to eBird [a real-time online check-

list program that collects and broadcasts bird data], so they can also keep track of the birds they see," says Frankel. "It's a very cool tool."

She says that the program is being promoted to Audubon chapters around the country, and the schools, neighborhood groups, and municipalities receiving mini-grants to create "Urban Oases" demonstration habitats will be asked to track their sites with YardMap.

The second program, called Hummingbirds at Home (www.hummingbirdsathome.org), joins Audubon's citizen science programs, such as the Christmas Bird Count and the Great Backyard Bird Count, by enlisting people to log observations of hummingbirds on flowers and note blooming patterns. Several recent studies indicate that the arrival of hummingbirds on their foraging grounds is out of sync with food availability and flower pollination. "The Hummingbirds at Home program aims to gain insights into what's going on, and how people can help," says Audubon chief scientist Gary Langham.

There is plenty of evidence to show that anyone can play a vital role in preserving bird habitats, says Tallamy, who even goes as far as to call it a moral imperative. "Our success is up to each one of us individually," he writes in Bringing Nature Home. "We can each make a measurable difference almost immediately by planting a native nearby. As gardeners and stewards of our land, we have never been so empowered—and the ecological stakes have never been so high."

Shovel Ready: Transforming Your Yard

- 1. Get started by signing Audubon's Healthy Yard Pledge to promote bird-friendly communities. It aims to remove invasive exotic plants; plant native species; reduce pesticide use; conserve water; protect water quality; and support birds and other wildlife. Visit audm.ag/HY-Pledge.
- 2. Begin small and have a plan. "Someone always comes up [after a talk] and says, 'I'm going to run home and rip out all my lawn,' "says Doug Tallamy, author of the renowned gardening book Bringing Nature Home. "That is not my recommendation. If you take something out, be ready to replace it." He suggests an easier pace. "This can be a hobby. You don't have to do it all at once." Or, for instant results, hire someone to do the work. If you already pay to have your lawn cut and cared for, you might consider putting at least part of that budget toward managing your yard in a way that's more beneficial

to birds.

- 3. Convert the salespeople at your nursery. If you go to one with the name of a native plant that you want to buy, they will likely take you to the closest thing in stock. "What you say to them is, 'That's not what I want. Can you get this for me?' And if they can't, you walk away," says Tallamy. "If they hear that enough they'll start carrying this stuff." (Find resources that can help you locate plants native to your region at audubonmagazine.org.)
- 4. Try to avoid cultivars of the native plants you're buying. When the horticultural industry tweaks a plant's features (for instance, its color or petal size and shape), the plants may become less desirable or even incompatible with the insects that evolved to eat them.
- 5. Shun the misconception that gardens brimming with native plants look weedy. "If you go to the fine gardens of Europe, many of the plants they display are from North America," says Tallamy. "So this notion that just because a plant grows down the street, it can't be used formally is just an urban legend." For some domestic inspiration, Tallamy points to a new 3.5-acre native plant exhibit at the New York Botanical Garden that is both beautiful and beneficial for wildlife in one of the world's most crowded cities.
- 6. There's power in numbers. Enlist your neighbors and wider community to help incorporate bird-friendly plantings in yards, parks, workplaces, schoolyards, and other public areas. Join a growing army of citizen scientists collecting data about how birds can coexist with us and become part of Audubon's Hummingbirds at Home program. Visit audubon.org/citizenscience, where you can also download the mobile app.
- 7. This winter participate in the Christmas Bird Count (birds.audubon.org/christmas-bird-count) and the Great Backyard Bird Count, two ongoing citizen science programs that help track long-term bird population trends.
- 8. Register your plot of habitat at Yard-Map and document its value to birds as you make improvements.
- 9. Hang out at home. Half the nation's lawn equals about 20 million acres—roughly the collective size of 15 national parks, including Denali, Yellowstone, Yosemite, Great Smoky Mountains, and The Badlands. "We have to get rid of the notion that nature is something you must drive to," Tallamy insists. "That's why people go to national parks, to connect with nature. You can do that right at home—every time we look out the window or go outside."

Kansas Wildlife Federation P.O. Box 771282 Wichita, KS 67277-1282

The Kansas Wildlife Federation is Working to Preserve a Way of Life for Kansas! Conservation of the state's natural resources means...

- Public awareness of our state's wonderfully diverse advantages and a determination to keep and improve them for wise use now and in future years.
- Proper safeguards—within the bounds of wise use—for the state's soil, water, forests and wildlife, to assure proper balance, use and advancement of our state's entire economy!

How You Can Help:

- Youth Membership: As a Youth member (for ages 8-17 as of January 1), your \$10 dues provide you with 6 electronic issues of the KWF newsletter, a personalized KWF Youth membership card and access to KWF Youth social media site (no voting privileges regarding regular membership matters).
- * Basic Membership: As a Basic member, for \$30 you'll receive 6 issues of the KWF newsletter packed with the latest information on wildlife resources, events and issues around the state. You also have voting privileges at the KWF Annual Meeting.
- **Expanded Membership:** When you send in your Expanded member dues of \$75, you receive the basic membership benefits and a complimentary ticket to the KWF Annual Meeting and CAP banquet.
- * Kansan: For an annual fee of \$150, you receive all the benefits listed above plus an additional complimentary ticket to the KWF Annual Meeting and CAP banquet.

Here's How to Join:

Complete the form on Page 17 and mail with your membership fee to: Kansas Wildlife Federation, P.O. Box 771282, Wichita, KS 67277-1282