



U. S. Fish and Wildlife Service

**Inside Region 3**

*September 2012*

**Rachel Carson:**  
**An Indelible Mark**  
**50 Years After Silent Spring**



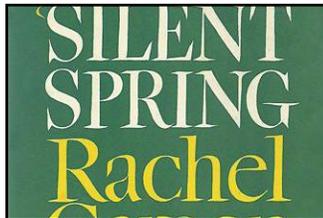
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*Rachel Carson and Bob Hines conducting marine biology research in Florida in 1952. Service photo.*



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*By Valerie Rose Redmond*

# RD's Corner

September 2012 marked the 50th anniversary of the publication of Rachel Carson's *Silent Spring*. Throughout the month, through a series of articles, Midwest Region contaminants specialists have shared their accomplishments and challenges, along with their thoughts on the legacy of Rachel Carson. You can see these articles online, and two of them are featured in this issue of *Inside Region 3*.

As I read these stories, I began to think about the parallel between Carson's work and the current endeavor by the Service to continue implementing strategic habitat conservation through the use of surrogate species. Surrogate species are used for conservation planning to support multiple species and habitats within an area.

While we are very early in the process of developing this approach, it seems clear that the groundwork was laid decades ago. Carson's work, which opened the world's eyes to the dangers of DDT, led to efforts that pinpointed the cause of the decline of the bald eagle. In turn, that work prompted the study of a suite of species whose populations were impacted by DDT and other environmental contaminants.

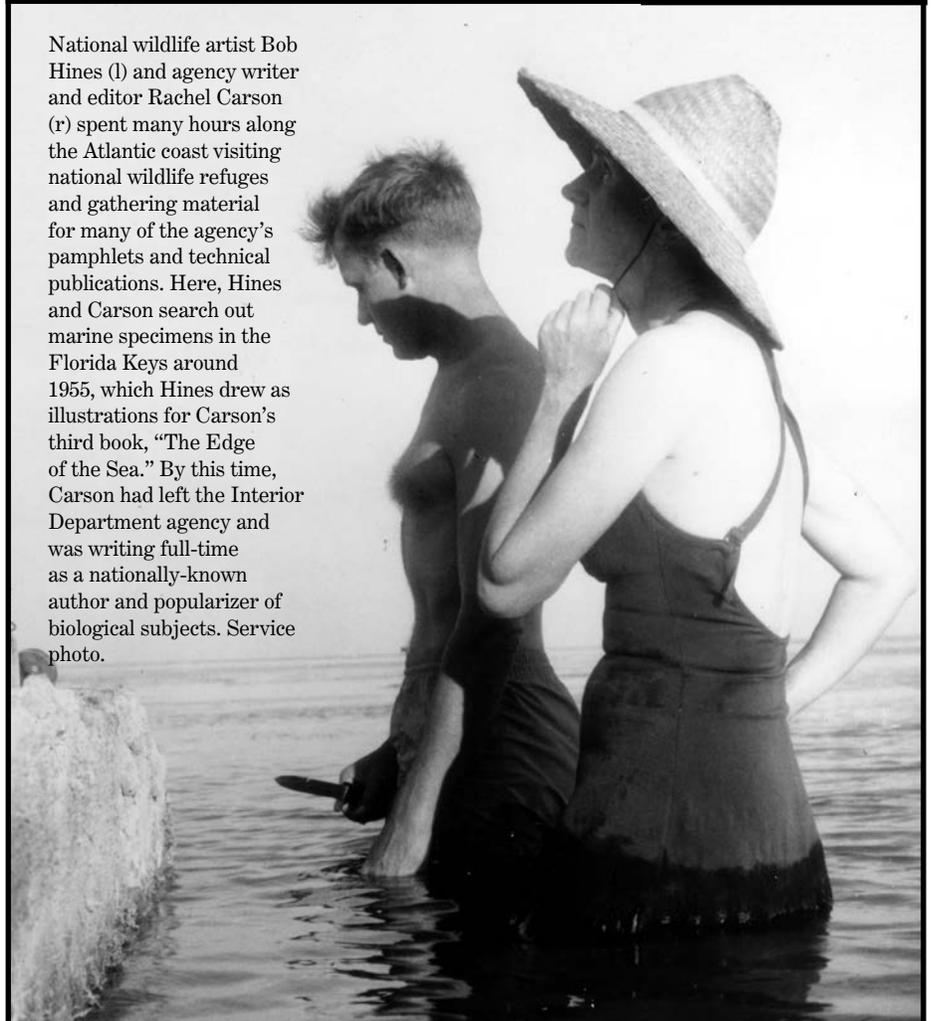
We do not yet know which species we will designate as surrogate species; but examples, such as the work done by Rachel Carson and the work we've done here in the Midwest on lake trout, copperbelly watersnake, bald eagles, gray wolves and others, demonstrates that by focusing our efforts on certain specific species, we can impact many other species. While the term surrogate species may be new to us, the concept is not; I ask you to keep that in mind as we move forward with implementing SHC.

Rachel Carson was a visionary whose legacy continues to guide our efforts. I like to think that among us today we have visionaries who will inspire conservation leaders decades into the future.

Tom Melius,  
Midwest Regional Director



Left: Rachel Carson, author of *Silent Spring*, at the typewriter in her library at home in Washington D.C. in March 1963. Photo by Bob Schutz/AP



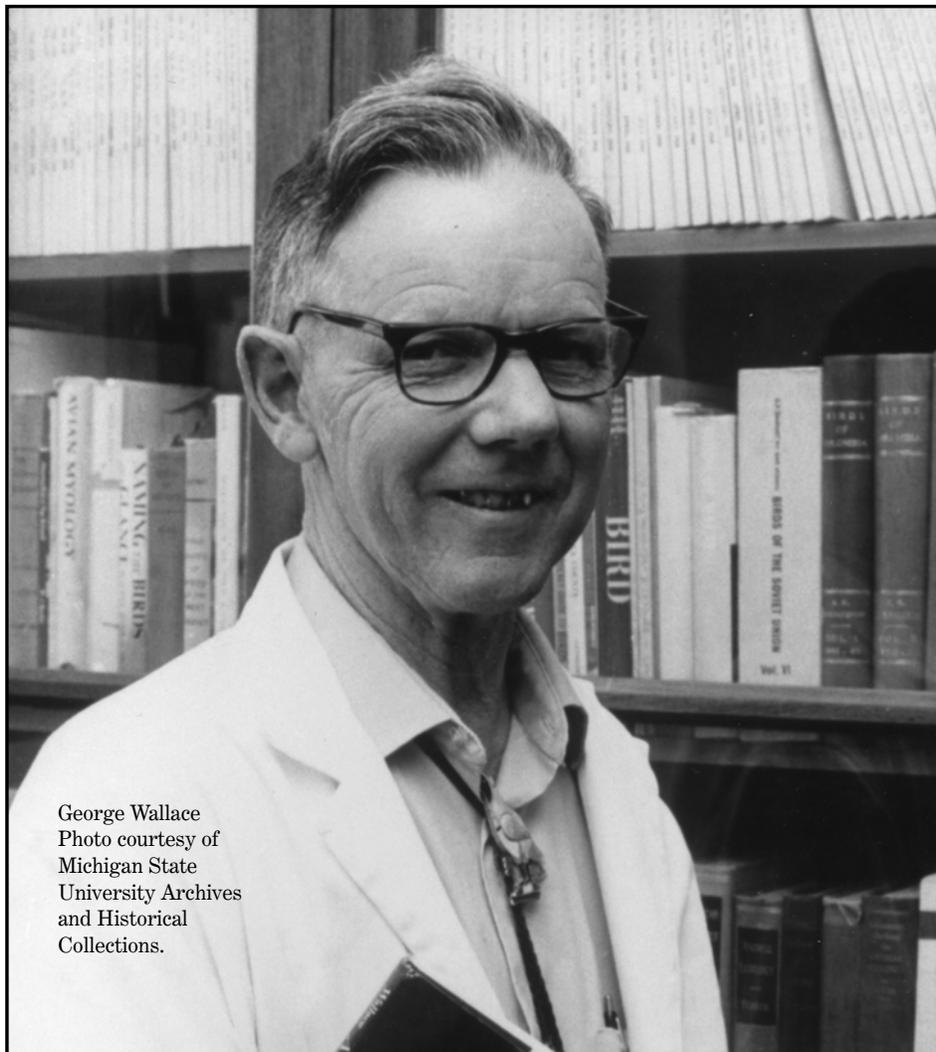
National wildlife artist Bob Hines (l) and agency writer and editor Rachel Carson (r) spent many hours along the Atlantic coast visiting national wildlife refuges and gathering material for many of the agency's pamphlets and technical publications. Here, Hines and Carson search out marine specimens in the Florida Keys around 1955, which Hines drew as illustrations for Carson's third book, *"The Edge of the Sea."* By this time, Carson had left the Interior Department agency and was writing full-time as a nationally-known author and popularizer of biological subjects. Service photo.

# A Legacy Continues within the U.S. Fish and Wildlife Service Environmental Contaminants Program

After years of witnessing American robins dying or dead on her lawn each spring, a St. Louis, Mich., resident sent two dead robins to the Michigan Department of Natural Resources Wildlife Disease Laboratory. Upon examination of the robins, the Michigan DNR sent the birds to a lab at Michigan State University where concentrations of DDT and its metabolites DDD and DDE were found in the robins' brain tissue. Soon thereafter, on June 22, 2012, the headline in *The Morning Sun*, a central Michigan newspaper read, "Dead Robins in St. Louis Poisoned by DDT." Yes, it was 2012 and, ironically, the date marked the 50th year since Rachel Carson, "launched the environmental movement" by explaining the history and effects of pesticides on our nation's wildlife in her book, *Silent Spring*. Rachel Carson's work led to a ban on DDT in the United States, but the responsibility to understand and mitigate the effects of DDT and other environmental contaminants continues.

The St. Louis incident is a reminder that despite 50 years, fish and wildlife are still impacted by environmental contaminants including those that have been banned. Today, the U.S. Fish and Wildlife Service Environmental Contaminants Program pays tribute to Rachel Carson as it continues the legacy of addressing contaminant issues that impact fish and wildlife.

The presence of DDT in Michigan robins is particularly chilling because the lethal impact of DDT on birds was first noted on Michigan State University's campus decades ago. In *Silent Spring*, Rachel Carson chronicled the story of how ornithologist George Wallace helped connect the dots between broad-scale insecticide use



George Wallace  
Photo courtesy of  
Michigan State  
University Archives  
and Historical  
Collections.



American  
robin.  
Service  
photo.

# A Legacy Continues within the U.S. Fish and Wildlife Service Environmental Contaminants Program

and the silencing of spring's harbinger, the robin. One of Dr. Wallace's graduate students began studying robin populations in 1954, unrelated to insecticide use. DDT was being sprayed on elm trees throughout the campus to fight Dutch elm disease. That spring, robins arrived as usual, but over the course of the season and during the following years, dead and dying birds appeared on campus and surrounding suburbs; fewer and fewer robins were seen. Dr. Wallace first suspected a disease of the nervous system, but then "in spite of assurances from the insecticide people that their sprays were 'harmless to birds' the robins were really dying of insecticidal poisoning; they exhibited the well-known symptoms of loss of balance, followed by tremors, convulsions, and death." Not all robins were killed. Dr. Wallace and others observed and documented that robins that managed to survive were not producing young.

Indications of the avenue of exposure – how DDT ended up affecting robins – started becoming evident after campus earthworms were inadvertently fed to crayfish and all the crayfish died; a snake in a lab cage fed campus earthworms went into violent tremors. Dr. Roy Barker of the Illinois Natural History Survey at Urbana provided an explanation of the exposure route by explaining that DDT clung to leaves of treated elms. After leaf fall, earthworms incorporated leaves, with their DDT coating, into the soil as well as into their own bodies. Robins were not exposed to DDT through direct contact but by ingesting earthworms. Picked up by feeding robins, DDT then traveled from the earthworms to the birds, was metabolized, and either killed robins outright or concentrated in reproductive organs, preventing them from reproducing.

This and other stories in *Silent Spring* highlighted the effects of the indiscriminate use of pesticides immediately following World War II, prompting Rachel Carson to conclude that, "as crude a weapon as the cave man's club, the chemical barrage has been hurled against the fabric of life – a fabric on the one hand delicate and destructible, on the other miraculously tough and resilient, and capable of striking back in unexpected ways." Rachel Carson's book and words have inspired many who have taken up causes and careers to safeguard our nation's fish and wildlife resources, including those serving within the Service Environmental Contaminants Program.

On June 19, 2012, 50 years after the release of *Silent Spring*, Environmental Contaminants Coordinator for the Service, Dr. Lisa L. Williams (an MSU doctoral alum), was notified of the test results of the St. Louis, Mich., robins. Based on her review of scientific literature that included work done at MSU in the 1960s, she verified that concentrations of DDE, a DDT metabolite, found in the robins were high enough to cause them to die. Dr. Williams passed the information on to the Michigan Department of Environmental Quality and the U.S. Environmental Protection Agency. As she reported "dead robins" and "DDT and its metabolites", Dr. Williams paused and thought of *Silent Spring*. She, perhaps like many other Environmental Contaminants Specialists in the Service, attributes the inspiration behind her career to Ms. Carson. Rachel Carson was a Service employee and her



Above: Rachel Carson. Source: unknown.

legacy continues as we strive to serve the American people and address contaminant issues that impact fish and wildlife. At the core of the Service's work is investigating the causes of observed effects of contaminants and seeking ways to prevent or mitigate those effects. The source of DDT in St. Louis, Mich., is thought to be the former Velsicol Chemical plant that manufactured pesticides along the Pine River until 1978 and is currently a designated Superfund site. The yard where the robins were found is adjacent to the former plant. While a river cleanup led to decreased levels of DDT in fish, cleanup of the plant site itself has been a long process and cleanup of adjacent properties has yet to begin. The EPA and the Michigan DEQ are now moving forward with a cleanup plan for those areas. Soon, DDT levels at the plant and in adjacent resident soils will be reduced so that American robins are no longer silenced as they feed on area lawns. -- *Jeremy N. Moore*  
*East Lansing ES FO*

# The Fox River: 50 Years After Silent Spring

If Rachel Carson walked along the shores of Green Bay today, she would observe Forster's terns flying overhead, notice egrets and herons foraging in near shore wetlands, and perhaps even witness northern pike migrating into coastal wetlands. The Green Bay shoreline is a far cry from the beaches of the Atlantic Ocean near Carson's Maine cottage where she found the inspiration for her best-selling book, "The Sea Around Us." But, an inspiring shoreline it is, nonetheless. Thanks to clean-up and restoration efforts in recent decades, there are vast improvements in the Bay and the Lower Fox River.

The story of Green Bay and the Lower Fox River reads much like other major shipping ports situated on the shores of the Great Lakes. The abundant natural resources were depleted quickly, factories and industries sprang up along major waterways, agriculture and industry dumped massive amounts of soil and contaminants into the waterways, and coastal wetlands were ditched and filled-in for development.

As early as the 1930s, local news stories reported Green Bay citizens outraged by the filth, stink and sewage in the Fox River and the Bay of Green Bay. Beaches were no longer swimmable and fish kills were common due to low oxygen levels in the water.

The Industrial Revolution and World War II brought about the use of hazardous chemicals by factories along the Fox River. Chemical wastes were typically untreated and released directly into the river. Chemical releases included PCBs (Polychlorinated biphenyl) used by paper mills from about 1954 to 1971 for the production of carbonless copy paper. Other paper mills de-inked and recycled the carbonless copy paper and continued to release PCBs until 1980.

The environmental movement of the 1960s, spurred by Rachel Carson's

landmark book, "Silent Spring," elevated environmental concern for Green Bay's toxic waterways to the forefront for a new generation. The movement spawned new laws such as the Clean Water Act and other state regulations that protected wetlands, and regulated industrial dischargers. Despite these positive changes, toxic legacy contaminants such as PCBs still remained throughout much of the Lower Fox River and the Bay system.



Rachel Carson.  
Service photo.

A federal law known as the Comprehensive Environmental Response, Compensation, and Liability Act, passed in 1980, helped address legacy contaminants such as PCBs at sites across the country, including Green Bay. The law authorized the Natural Resource Damage Assessment process, to replace, restore or acquire habitat for fish and wildlife injured by legacy contaminants such as PCBs. The NRDA process began in the late 1990s at the Lower Fox River/Green Bay site.

The first steps in the NRDA process involved scientists assessing the damages to fish, waterfowl, migratory birds and other wildlife as a result of the PCB releases. Reports documenting these injuries were published along with a

restoration plan describing what needed to be done to make the environment "whole" again.

Through the NRDA legal process, settlement funds have been provided by companies that were potentially responsible for releasing PCBs. The funds have been used for restoration projects that benefit fish and wildlife injured by PCBs. Projects aim to restore or reclaim the injured natural resources, or, if that is not possible, replace or acquire natural resources equivalent to those that were lost or harmed.

To date, over \$36 million in settlement funds have been used for projects throughout northeast Wisconsin. These include: public land acquisitions, wetland and stream restorations, fish stocking and rearing, and public recreation facility construction. Another \$22 million in matching funds have been contributed to these projects by other grant programs. Rachel Carson would be pleased with the progress the Lower Fox River/Green Bay environment has made in recent decades. We have her to thank for the movement that led to the environmental regulations that resulted in these improvements. In a few more generations, perhaps, fish consumption advisories will be lifted, and anglers should be able to eat the fish they catch. The city of Green Bay is in the early planning stages to, once again, have a swimmable beach. Water quality has improved greatly. A diverse and balanced fishery is rebuilding in the waters of Green Bay and the Lower Fox River.

While dredging to remove PCBs in the Lower Fox River is expected to wrap-up in 2017, restoration for fish and wildlife species will continue long after the cleanup has been completed.

--Betsy M. Galbraith  
Green Bay Field Office

# Rachel Carson: An American Heroine's Indelible Mark 50 Years After Warning of Silent Spring

This September will mark 50 years since the publication of the ground-breaking book, "Silent Spring" by Rachel Carson. It seems fitting to pause for a moment to pay tribute to this American heroine, Rachel Carson and her conservation legacy. Merriam-Webster's dictionary defines a hero as one who shows great courage. Carson was that and more. A brilliant writer, she is credited by many with the modern environmental movement that inspired Earth Day, an international day of environmental awareness that came at the personal cost of slamming head first into a libelous wall of bitter contention and conventional wisdom. Her bestselling book, first published in the *New Yorker*, was an indictment of wide scale pesticide use, brought environmental awareness to the forefront for the American public, and ultimately led to a nationwide ban of DDT. The book takes its title from the opening chapter in which Carson depicts a town eerily devoid of the sounds of nature, the devastation of which resulted from rampant, unchecked pesticide use. The U.S. Fish and Wildlife Service continues her work on a litany of issues, including emerging contaminants and Natural Resource Damage Assessment projects like the Enbridge (in Michigan) and Gulf oil spills that are still plaguing the nation.

Born in Springdale, Pa. on May 27, 1907, Carson was a trail blazer on many levels. She was a conservationist who won a scholarship to complete graduate work in biology at John Hopkins University in Maryland—virtually unheard of for a woman in 1929.

It's relatively easy to remember all of Rachel's great achievements. But it is just as important to remember her



Above: Rachel Carson, field biologist, at work . Photo by Alfred Eisenstaedt, Time & Life Pictures, Getty Images.

as a woman too—a human being. Yes, Rachel's achievements were monumental, but they came at great sacrifice. She was a woman who endured terrible ridicule and scrutiny in her quest to save our environment from the ravages of chemical pesticides. Not only were her credentials called into question, but her integrity and sanity were as well.

In the 1963 CBS news report, "The Silent Spring of Rachel Carson," Dr. Robert White-Stevens, a spokesman for the chemical industry, said the major claims of the book were, "gross distortions of the actual facts, completely unsupported by scientific, experimental evidence...". One chemical company passed out thousands of leaflets that derided the book. Several sponsors dropped out of the aforementioned CBS documentary that featured an interview with the author. It suffices to say that her opponents were formidable.

In the wake of Carson's legacy, environmentalists are still working to resolve contaminant issues and to keep the American public informed

about them. Contaminants of emerging concern are found in personal care products, on farms, or by industry and business in a variety of common products such as deodorants, steroids, hormones, prescription and non-prescription drugs, plasticizers, pesticides, and detergents. Many of these contaminants are not regulated or inadequately regulated despite evidence suggesting that fish and wildlife suffer developmental and reproductive effects when exposed. Although we are able to detect these substances in surface water, little is known about their effects on fish and wildlife populations.

History makers are almost inevitably the unfair targets of ignorance, fear and comfort in the stagnant status quo. This September, as we pause to remember the contribution and sacrifice this phenomenal woman made, let's remember that Rachel Carson was not only a trailblazing environmentalist and talented, influential writer, but she was an enormously courageous human being—a heroine in her finest form.

To learn more about emerging contaminants and what the Service is doing about them, visit: <http://www.fws.gov/contaminants/>

--By Valerie Rose Redmond  
*External Affairs*

## Game Fair -Wildlife and Sport Fish Restoration Program Highlights





STATE of MINNESOTA

Proclamation

- WHEREAS: The Pittman-Robertson Act of 1937 was signed into law by President Franklin D. Roosevelt 75 years ago this year, and
- WHEREAS: This act formed an unprecedented and powerful bond among state and federal wildlife agencies, gun and ammunition makers, and hunters to fund habitat acquisition, habitat management, firearms safety training, and other programs that sustain our hunting heritage; and
- WHEREAS: Minnesota has received no less than \$210 million of the \$6 billion the Pittman-Robertson Act has generated since its inception; and
- WHEREAS: This public-private partnership is to be applauded as an exemplary wildlife conservation funding model.

NOW, THEREFORE, I, MARK DAYTON, Governor of Minnesota, do hereby proclaim August 10, 2012 as:

PITTMAN-ROBERTSON ACT  
75<sup>TH</sup> ANNIVERSARY DAY

in the State of Minnesota.



IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Minnesota to be affixed at the State Capitol this 3<sup>rd</sup> day of August.

*Mark Dayton*  
GOVERNOR

*Mark Schultz*  
SECRETARY OF STATE

# Take Pride, It's Your Nature! Wildlife Restoration Program reaches 75-year Milestone

State and federal conservation leaders joined arms with Minnesota's hunting and shooting community this August to celebrate a success story 75 years in the making, a story authored by the hunters and conservationists of past, written into law by President Franklin D. Roosevelt in 1937 as the Pittman-Robertson Wildlife Restoration Act, and central to future wildlife management.

To mark the occasion Gov. Mark Dayton declared Aug. 10 Pittman-Robertson Act Day in Minnesota, in honor of conservation legends who three quarters of a century ago stood up for the nation's natural resources in the face of seemingly insurmountable threats to wildlife populations. Representatives from the U.S. Fish and Wildlife Service and Minnesota Department of Natural Resources shared their gratitude with shooting sports manufacturers and distributors and local outdoors men and women at events sponsored by Federal Premium Ammunition and Game Fair.

Federal and state partners stood alongside hunting and shooting industry representatives to commemorate the 75th anniversary of the Wildlife Restoration Program and educate visitors about the program's legacy. Speakers at Game Fair included Service Regional Director Tom Melius, Minnesota DNR Commissioner Tom Landwehr, and Service Chief the Wildlife and Sport Fish Restoration Programs in the Midwest Jim Hodgson, Outdoor News editor Rob Drieslein, and Federal Premium Ammunition's Director of Conservation Programs Ryan Bronson.

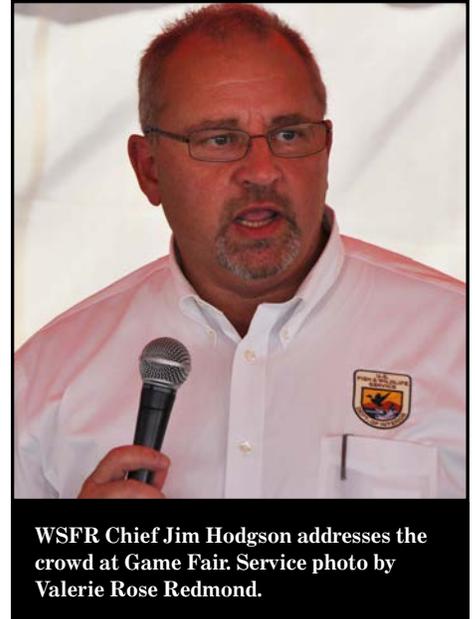
Through excise taxes on hunting and shooting sports equipment and hunting

license revenues, the Wildlife Restoration Program has generated more than \$6 billion since revenue collections began in 1939.

"The Wildlife Restoration Program has given Americans the opportunity to enjoy fish, wildlife, and the outdoors for the past 75 years," said Tom Melius, Midwest regional director of the Service. "With your support, the Service will continue to work hand in hand with our conservation partners at the Minnesota DNR to conserve habitat for fish and wildlife, and recreational opportunities for hunters and shooters for the future."

Tom Landwehr, DNR commissioner, said the Wildlife Restoration Act, which created a federal tax on firearms and ammunition sales, continues to benefit hunters as these dollars are returned to states to manage wildlife and protect habitat. "The visionary thinking of 75 years ago created a financial mechanism for restoring and enhancing wildlife populations for the benefit of all Americans," said Landwehr. "Minnesota has received close to \$210 million since the program began. These dollars are used to restore and acquire habitat, conduct wildlife surveys, deliver hunter education and safety programs, and more." Minnesota's 2012 allocation was \$11.1 million.

Ryan Bronson, conservation program director for Federal Premium Ammunition of Anoka, said "Some very forward-thinking smart people" knew what they were doing 75 years ago. Said he, "Charles Horn, our owner at the time, was among them. He was involved in the negotiations. He,



WSFR Chief Jim Hodgson addresses the crowd at Game Fair. Service photo by Valerie Rose Redmond.

like others, understood the connection between on-the-ground conservation and the long-term health of the hunting community."

In the early 1900s, when many fish and wildlife species were dwindling in numbers or disappearing altogether, the hunting and shooting industries stepped forward to help state fish and wildlife agencies counteract the crisis. Manufacturers supported the use of excise taxes on equipment and sought legislation to ensure federal funding would be directed to aid agencies in managing and conserving America's natural resources and providing hunting access.

For more information about the history of the Wildlife Restoration Program and conservation stories from across the nation, visit [wsfr75.com](http://wsfr75.com).

For video highlights visit: <http://www.fws.gov/midwest/InsideR3/video/GameFairMN2012.flv>

--Ashley Spratt  
External Affairs

# The Greatest Conservation Story Never Told



75 Years  
IT'S YOUR NATURE

It was 1933. The Dust Bowl was lifting 100 million acres of America's heartland into the air, sending clouds of topsoil from Oklahoma, Kansas, South Dakota, New Mexico, Colorado and Texas billowing eastward as far as New York City. The "black blizzards" blew straight into the nation's capital, sending an environmental wake up call to a country already reeling from the Wall Street crash of 1929. 2.5 million Americans were on the move in search of a better living, and unemployment was soaring to 25%. The very fabric of our cultural and ecological heritage was unraveling and turning to dust. Out of such enormous loss, our environmental consciousness awoke with a cry. President Franklin D. Roosevelt lost no time in launching programs to reverse the environmental degradation of our landscape. The Soil Conservation Service and the Civilian Conservation Corps were created and sprang into action.

The story of the federal government's successful efforts to mend the environmental disasters of the 1930s is well-known. But there's another story that needs to be told. It's about a group of people who, since the early 1900s, had been tramping the forests, fishing in the streams, hunting the mountains and plains of America. They had been watching the dust clouds of

environmental degradation brewing in the skies for 30 years. And for 30 years, they had tried with all their might to do something about it.

They were composed largely of America's elite sportsmen and naturalists. They were lawyers, businessmen, politicians, foresters, and zoologists whose first love was the natural world. They had come together to preserve what they knew in their hearts was this country's greatest—and most gravely threatened—treasure: its mighty salmon churning up our Western rivers; its pronghorn antelope streaming across the plains, and waterfowl flying across the skies. They had pledged themselves to saving America's fish and wildlife legacy.

Many of them had shouldered the job of managing fledgling state fish and game agencies, only to be repeatedly frustrated by ineffective and incomplete laws, limited information, and political interference. They struggled to manage fish and wildlife species about which very little was known—other than that they leaped, crawled, and flew across state lines. Territorial squabbles between federal, state and local governments, industry and sportsmen were

common at a time when most Americans were more concerned about preserving their right to use wildlife resources than to care for them. And nobody wanted to foot that bill.

But somebody had to. And people like Aldo Leopold of Wisconsin and Ding Darling of Iowa knew that something had to be done before one of the richest fish and wildlife legacies in the world was but a footnote in our history books. Nevertheless, securing the massive and continuing amounts of funding needed to guarantee the restoration and management of wildlife in America seemed utterly impossible. As the country slid further and further into an economic depression, fish and wildlife restoration became a luxury that Americans simply couldn't afford. In 1929, a weary A. Willis Robertson, then director of Virginia's state fish and game agency, wrote to a good friend: "I have been rushed to death all of the summer and owing to the unsettled political conditions, or the inactivity of our wardens, or a growing consciousness of the value of wild life, I have gotten more kicks recently concerning various and sundry matters than at any time during the past three years and it has kept me busy trying to keep the various complainers and criticizers satisfied. Anyone who has an idea that a public job is a bed of roses should just lie on it for a

Continued on next page.

# The Greatest Conservation Story Never Told

few months and he will so find that the thorns are more prominent than the perfume.”

It is difficult to imagine the determination required of these dedicated individuals—the faith, really—to keep up the battle to save this nation’s wildlife. These were not young 20-year-olds fueled by idealistic fervor who had yet to feel the sting of reality. These were ageing gray-haired, battle-weary visionaries. They believed in the power of the democratic process to effect social change. But they were under no illusions about how long it would take. As the great sportsman, conservationist and philosopher Aldo Leopold wrote in 1930, “Reforms are attained by evolution, not by prescription, of ideas. Real reforms are always home-made.”

It wasn’t until 1936 that the opportunity arose to divert an existing federal excise tax on sporting guns and ammunition to support the restoration of America’s wildlife. Legislation was crafted to allocate the proceeds from the excise tax to states to be matched hunting license fees for the sole purpose of wildlife restoration. America’s sportsmen and sportswomen would foot the bill.

This year marks the 75th anniversary of the passage of the Federal Aid in Wildlife Restoration Act. More than \$6.4 billion has been generated through what has proved to be the most powerful and successful wildlife restoration and management program in the world. It birthed the science of fish and wildlife management and removed it from the political arena of budget battles and shifting economies. It provided the funding necessary to complete long-range research projects to understand species requirements and

the money to design on-the-ground management projects to restore their numbers. It provided the funds to purchase millions of acres of wildlife habitat, and restore millions more. A companion bill, the Federal Aid in Sport Fish Restoration Act aimed to restore America’s fisheries was passed 13 years later. Since 1950, that legislation has provided more than \$5.4 billion for fisheries research, habitat restoration, recreational boating access, construction of fish hatcheries, and aquatic education.

The Wildlife and Sport Fish Restoration Program has been nothing short of revolutionary. It is the cornerstone of conservation in this country. And it has been a more than \$12 billion investment by this country’s sportsmen and sportswomen, anglers, boaters, and shooters.

Because of WSFR, a hunting and fishing license is not about grabbing a one-day or one season ticket to the outdoors. It’s a 24/7 investment in fish and wildlife conservation. And it’s not the exclusive privilege—or responsibility— of the angler, boater, hunter or shooter. We’re all in this together. We all have the opportunity to hear a turkey gobble on a mountain ridge at sunrise, or to watch a buck in velvet lift his head to test the wind and to know for a single moment how much greater, how much grander the world is than we ever imagined it from our office windows. It’s your birthright. It’s your nature. Because of WSFR, we have the opportunity to rediscover it.

## The Buzz

### Surrogate Species Training

The Midwest Region will offer a series of workshops on Surrogate Species, beginning with a regional office session for a smaller group of regional office employees on October 11.

### Last One Standing

This edition is the last PDF version of “Inside Region 3.” A multi-media version is now available on Inside FWS. You can go directly to this and future issues by clicking on this link: <http://www.fws.gov/midwest/InsideR3/>

# Upper Mississippi River National Wildlife and Fish Refuge Celebrates New Visitor Center

Midwest Regional Director Tom Melius joined staff from Upper Mississippi River National Wildlife and Fish Refuge on August 25 to celebrate the grand opening of the La Crosse visitor center in Onalaska, Wis.

The event kicked off with opening words and welcomes from refuge leadership and community officials and was followed by a ribbon cutting ceremony and a day of educational activities. Midwest Regional Director Tom Melius was pleased to join enthusiastic staff and community partners in welcoming everyone to this new place of learning and sharing.

“When it comes down to it, this facility is all about the children. This is a place for families, students and others to start their discoveries of the Upper Mississippi River,” noted Melius.

Attendees were treated to a day full of learning and fun, including family activities, educational talks, guided prairie walks and building tours. Wildlife educator Joan Schnabel shared her knowledge of wild birds and captivated visitors with a live bird demonstration including Sky, her educational red-tailed hawk. Professional photographer Alan Stankevitz shared beautiful images of the refuge lands through the changing seasons and visitors learned about the birds of the sand prairie ecosystem from Upper Mississippi River National Wildlife and Fish Refuge wildlife biologist Dr. Stephen Winters.

The refuge received funding from the American Recovery and Reinvestment Act for the construction of the buildings. The 12,000 square foot visitor center and 6,000 square foot maintenance building include exhibits, staff offices, storage, bookstore and gift shop, and vehicle work areas.



**Above: Regional Director Tom Melius joined community members, Congressman Ron Kind, refuge staff and other elected officials to celebrate the grand opening of the La Crosse visitor center on Sat. August 25. (From L to R: Tara Johnson, La Crosse County Board of Supervisors; State Representative Steve Doyle; Congressman Ron Kind; Tom Melius, Midwest Regional Director, USFWS; Jim Nissan, La Crosse District manager, USFWS; State Senator Jennifer Schilling; Kevin Foerster, Refuge Supervisor, USFWS; Rolly Bogert, chairman, Town of Onalaska; Wes Hurlburt, Onalaska Area Business Association; Joe Chilsen, Mayor of Onalaska. In the front row, Danielle, Emma, Benson, and Heidi look on.). Service photo by Garrett Peterson.**

The facility is designed to maximize “green” materials and technology. Solar panels will supply electricity and hot water, which will offset our carbon footprint. Additionally, environmentally friendly materials, such as flooring made from linseed oil, cork and other natural materials, also help this new facility meet LEED Silver certification.

Landscaping for the Center features local, native plants that require less water and maintenance. Placement of the building maximizes natural

light and features building material chosen with energy efficiency and the environment in mind.

Sand Lake Elementary School, a key educational partner of the refuge, will continue to help students explore and discover the refuge throughout the seasons. The Center and surrounding site will be a living laboratory where students can directly observe and interact with nature to learn about math, science and language arts. Accessible trails provide opportunities for exploration of the prairie.

# Pine Creek North Wildfire Seney National Wildlife Refuge

In the wee hours of the morning on Monday May 21, lightning struck igniting a fire in a section of the Seney National Wildlife Refuge, just north of the Fishing Loop. By the time the fire was reported to refuge personnel, at about 2:30 p.m., more than 60 acres had already burned and refuge personnel sprang into action. The fire was promptly accessed, and plans were quickly made to put out the blaze.

Fortunately, refuge staff members are intimately familiar with the area and Seney National Wildlife Refuge Fire Management Officer Gary Lindsey had spent many hours preparing for just such an emergency. Many areas of the refuge have established fire plans which assist with managing an incident such as this. With plan in hand, Lindsey and other fire personnel were able to effectively call in resources and begin to suppress the fire.

Sometimes the safest, easiest, most environmentally-friendly and cost-effective way to extinguish a fire is by conducting burn out operations. A burn out is when firefighters ignite fire inside a control line to consume fuel between the leading edge of the fire and the control line. On the Pine Creek North Fire firefighters used man-made and natural barriers such as streams, ditches, roads, lakes, etc., as control lines. By igniting fire along these features in a purposefully timed and controlled manner, the fire fighters were able to burn out the fuel between these features using fire with less intensity than if the fire had burned up to them unchecked. During the Pine Creek North Wildfire, this practice was used to stop the fire from spreading past the Holland Ditch. The refuge's

pool system and the Fishing Loop road stopped the spread of the fire to the south.

On May 23, the fire made a run that threw burning embers a distance of quarter mile across Pine Creek Road and Pine Creek igniting a spot fire. This occurred before the crews had time to complete the burn out operation along Pine Creek Road. The spot fire burned 400 acres before it was finally contained. Seven amphibious tracked vehicles, two CL-215 air tankers and a type one helicopter were used to help slow and eventually put out this fire. An effective technique used when dealing with this portion of the fire was to use compress lines where the tracked vehicles drove over marsh plants and pressed them into the water to help slow the fire's spread. These compressed lines were then burned out to create a barrier. Refuge managers also diverted as much water as possible into these wetlands to raise the water levels which helped stop the spread of the fire.

About one and a half weeks after the wildfire began it was listed as contained. In the end, roughly 3,420 acres burned. It is important to remember that wildfire is a natural occurrence and vital for the health of most forests. Wild animals have evolved with fire and, if they are able, they walk, run, fly, swim or dig to escape. More than a century ago, wildfire spread through this area uncontrolled with few homes or buildings in its path, leaving the area revitalized and new. Today, we control wildfire to stop the damage it may cause to our communities. Fire isn't always bad for our environment; it's bad for us because we live among landscapes that need fire to survive.

Learn more about the Pine Creek North Wildfire: <http://www.inciweb.org/incident/2881/>

--Sara Giles, Seney NWR

Below: Torching on the Pine Creek North Wildfire. Service photo by Sara Giles.



# CNN's Soledad O'Brien Talks with USFWS on Children and Nature and Connecting with Audiences

Soledad O'Brien, host of CNN's morning news show, "Starting Point," can be hard to catch up with, as she's always on the go. But recently, she paused graciously to chat with U.S. Fish and Wildlife Service employee, Valerie Rose Redmond of the Midwest External Affairs Office. In a brief interview, she shared some of her thoughts on children and nature and how to connect with audiences.



U.S. Fish and Wildlife Public Affairs Specialist, Valerie Rose Redmond and CNN Broadcast Journalist, Soledad O'Brien, smile for the camera after a brief interview. Photo courtesy of Valerie Rose Redmond.

says, "I have four kids. We take them upstate New York a lot. It's just lovely nature. The kids love hiking and swimming. They're really into all of that."

--Valerie Rose Redmond,  
*External Affairs*

Below: O'Brien makes an emphatic point during a discussion about framing stories around the people that they impact. Photo courtesy of Valerie Rose Redmond.

When asked how the U.S. Fish and Wildlife Service could garner more mainstream media attention on conservation issues, O'Brien advised writers to frame their agenda and policy items around the people that they impact. "I think stories are about people," she says. "What [audiences]

want to understand is that a child gets to do X because of some policy so I would start framing your stories that way."

When asked if she engages her children in nature, O'Brien is enthusiastic. "Yeah I do," she



## Success for the American Fisheries Society's Annual Conference

The 142nd Annual Meeting of the American Fisheries Society was held last month at the River Center in St. Paul, Minn. Themed, "Fisheries Networks: Building Ecological, Social and Professional Relationships," the conference featured a host of fishery workshops, plenary speakers, a tour of historical Mississippi River sites and a scenic run along the Mississippi River, aptly named Spawning Run 5K.

U.S. Fish and Wildlife biologist Ann Schneider of Wildlife Fish and Sport

Recreation served as a meeting co-chair for the event. "I was very happy with how the conference turned out," she says. "It was great to partner with the Minnesota Department of Natural Resources and the American Fisheries Society on such a worthwhile event."

Some of the topics included Asian Carp, Constructing Fish Passage Projects, Climate and Fisheries: Responses of a Socio-Ecological System to Global Change,

Contaminants, Toxicology, & Fish Health, Human Dimensions, Education, Outreach, and a day-long symposium on the 75th Anniversary of the WSFR program, among others.

--Valerie Rose Redmond,  
*External Affairs*

# Juvenile Higgins' Eye Pearly Mussels Going Mobile

The U.S. Fish and Wildlife Service's Genoa National Fish Hatchery, which safeguards and propagates freshwater mussels for reintroduction into native habitat, is utilizing advanced technology in mobile rearing to evaluate how different water sources support growth and survival of young freshwater mussels. The Eastern Tallgrass Prairie and Big Rivers Landscape Conservation Cooperative has dedicated funding to this project to help assess propagation techniques in light of broad-scale stressors to our aquatic resources.

"The Eastern Tallgrass Prairie and Big Rivers LCC is very pleased to be able assist with funding for the mussel research project," said LCC Coordinator Glen Salmon. "The tremendous network of big rivers, smaller tributaries, streams and

headwater creeks form the very lifeblood across the geography of the regions this partnership covers. Freshwater mussels are an

important component of Midwestern river systems and this project will increase our knowledge about possible reintroduction techniques."



**Above: Juvenile Higgins' eye pearlymussel growing within a mobile rearing unit. The bright ring along each mussels' edge shows growth from this year. Service photo.**

A mobile aquatic rearing station, or MARS, was deployed along the banks of the Mississippi River at the U.S. Army Corps of Engineers' Blackhawk Park near De Soto, Wis., in the summer of 2012 to raise rare and endangered mussel species, including Higgins' eye pearlymussel, hickorynut, black sandshell and snuffbox. Freshwater mussels like these are known as ecological engineers for their unique ability to siphon phytoplankton, bacteria and fungi from the water column and deposit nutrients into the sediment that feeds other aquatic life.

*--Ashley Spratt,  
External Affairs*

## Upper Mississippi River NWFR Celebrates

Continued from page 13.

The refuge encompasses one of the largest blocks of floodplain habitat in the lower 48 states. Bordered by steep wooded bluffs that rise 100 to 600 feet above the river valley, the Mississippi Continued. River corridor and refuge offer scenic beauty, a wild character and a productive fish and wildlife habitat in America's heartland.

The refuge hosts more than 3.7 million annual visits for hunting,

fishing, wildlife observation and photography, and participation in programs. Recreational use of the refuge results in \$73.5 million in retail expenditures in the 19 county area surrounding the refuge. Total economic output associated with the expenditures amount to \$89.9 million.

Beginning August 26, the visitor center will be open daily through Thanksgiving.

The hours will be as follows:

Monday - Friday 8:00 a.m. – 3:30 p.m.  
Saturday - Sunday 9:30 a.m. – 5:00 p.m.

After Thanksgiving and until mid-May, the Center will be open weekdays. The new visitor center is located near the junction of County Roads Z and ZN on Brice Prairie (N5727 County Road Z) in Onalaska, Wis.

For more information, call 608-779-2399.  
*--Paula Ogden-Muse,  
Upper Mississippi River NWR*



## U. S. Fish and Wildlife Service

<http://www.fws.gov/midwest/>



Above: U.S. Fish and Wildlife Service Deputy Ethics Counselor, Anne Badgley gives ethics training to regional office employees. Service photo by Valerie Rose Redmond.

**Thank you for entering your journal reports and photographs in U.S. Fish and Wildlife Field Notes (<http://www.fws.gov/FieldNotes/>).**