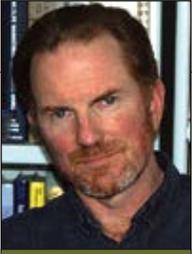


THE COOPERATIVE FISH AND WILDLIFE RESEARCH UNITS



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Ding's Brilliant Idea

The 1930s were hard times. The United States was in the midst of its worst economic depression, and clouds of soil from America's breadbasket were blackening the skies over Chicago. People were pulling up stakes,

or what they had left of them, from our heartland and making the long journey west to the promised land of California. Our nation's wildlife was on the brink once again.

By 1930, conservation was an institution in America. The social movement that began with our first sportsman's organization, Carroll's Island Club in Maryland, circa 1830, and the New York Sportsmen's Club in the 1840s, was brought to maturity principally through the efforts of the Boone and Crockett Club and its members, such as Theodore Roosevelt, George Bird Grinnell, John F. Lacey, Gifford Pinchot, William Carey Sanger, William T. Hornaday, Charles Sheldon and others. A system of conservation was in place—comprised mainly of seasons, bag limits, enforcement, and refuge areas administered by state and federal agencies. But wildlife was still suffering declines.

When Roosevelt ascended to the presidency at the turn of the century, science was not a major tool in wildlife conservation. Naturalists recorded and catalogued species, much like geologists described rocks and astronomers planets. A new breed of naturalists emerged—Roosevelt being one of them—who recognized that species were not like plants or strata, and that civilization could destroy them. Roosevelt, in what would become known as the Roosevelt Doctrine, called for a new way of doing conservation; a way where science would be the foundation for wildlife policy—a principle that became one of the major tenets of the North American Model of Wildlife Conservation.

Early wildlife science practitioners included Herbert Stoddard, whose experiments in Georgia during the 1920s showed how habitat management could

enhance northern bobwhite populations, and Aldo Leopold, Boone and Crockett Club member, who is credited as the father of modern wildlife management. In the late 1920s, the organization now known as the Wildlife Management Institute asked Leopold and a group of leading wildlife conservationists to develop a vision for the future of wildlife conservation in North America. The American Game Policy was presented at the annual meeting of the

land, and wildlife that epitomized the Dust Bowl years, and his advocacy for conservation reforms in Iowa resulted in his being named the first chair of the Iowa Fish and Game Commission. Darling took notice of the clarion call of the 1930 American Game Policy, and with the commission sensing the lack of trained wildlife managers and scientific information, he came up with an idea that he brought to R.M. Hughes, president of the Iowa State College (now

Iowa State University). Darling proposed a tripartite agreement where the college, the commission, and he would each contribute funds to establish a cooperative program for research in wildlife conservation. The deal was struck in 1932, and Dr. Paul Errington, a doctoral student of Aldo Leopold's from Wisconsin, became the leader of the first Cooperative Wildlife Research Unit.

Henry Wallace, a native Iowan, was secretary of agriculture under President Franklin D. Roosevelt and suggested to FDR that Darling be nominated director of the Federal Bureau of Biological Survey. Following a personal call from the president and much deliberation over the personal and financial sacrifices such a move would entail, Darling agreed. In March 1934, he became director of the Agriculture Department's Biological Survey that is now the Interior Department's U.S. Fish and Wildlife Service. Darling brought his Cooperative Wildlife Research Unit idea to Congress while searching for support to establish a unit system

nationwide. He invited a group of leaders to dinner at the Waldorf Astoria in New York City in 1935, including executives from the Hercules Powder Company, the Dupont Company, and the Remington Arms Company. Darling had already received pledges of support from land-grant universities in nine states, and the firearms industry executives clearly saw the benefit of such a program to the future of hunting and the national interest in wildlife conservation. They pledged support through what is now the Wildlife Management Institute (WMI), and a national program of Cooperative Wildlife Research Units became reality as a

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American Game Conference in New York City in December 1930. The policy called for sweeping changes, most notably a transformation from conserving to restoring wildlife with trained professionals conducting research to find facts related to problems affecting wildlife. Where would these trained professionals come from and how would research needs be identified and conducted? Enter Jay Norwood "Ding" Darling.

Ding Darling was a cartoonist and political satirist for the *Des Moines Register* in Iowa and a Regular Member of the Boone and Crockett Club. An avid sportsman, he witnessed the changes occurring in climate,

four-legged stool of state, federal, university, and private cooperators.

In 1960 Congress enacted the Cooperative Units Act authorizing fisheries to be included in the unit system portfolio. From the original 10 Cooperative Wildlife Research Units established after 1935, there are now 40 units at universities in 38 states (Montana and Wisconsin have separate wildlife and fisheries units). The cooperative structure has remained intact, with the federal government funding the salaries of the unit scientists, the university providing these scientists graduate faculty appointments along with office, laboratory, and administrative support, the state fish and wildlife agency providing operational funding, and the Wildlife Management Institute providing guidance and support. Annually, each unit's coordinating committee, composed of representatives from each of the cooperators, meets to identify research and training needs and formally approve the research agenda. In the mid-1990s, all Interior Department research offices were pulled out of their home agencies and placed in a new agency, the National Biological Survey (NBS) with the stated intent of having a firewall between those who do the science and those who enforce regulations. Ultimately, the NBS was disbanded and all biological science within the Interior Department was placed within the U.S. Geological Survey, which is home today for the Cooperative Fish and Wildlife Research Units. The U.S. Fish and Wildlife Service has remained a cooperator, and hundreds of research projects are being conducted today by the units to address their science needs.

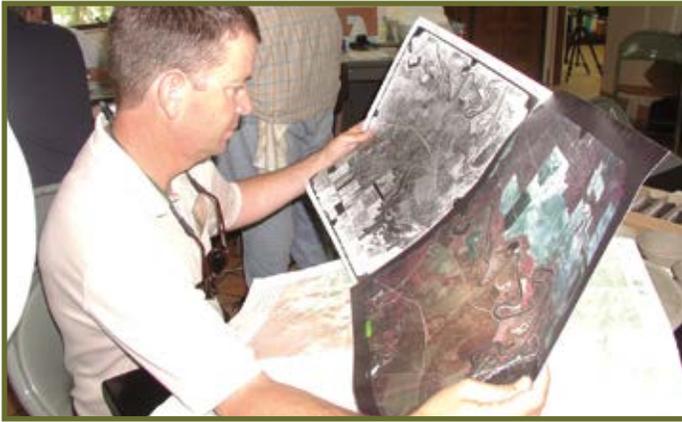
Throughout the evolution of the program, the mission has held steady: (1) to conduct research to provide science solutions to fish and wildlife management needs of the cooperators; (2) to train the next generation of wildlife and fisheries professionals through master's, doctoral, and post-doctoral investigations; and (3) to provide the training and technical assistance to cooperators to help them in applying the latest science tools and technologies. Students graduating from the Cooperative Research Unit program have a particular brand associated with them; agencies know they have a leg up on other graduates because they have worked with professional biologists from agencies and



ABOVE: Ding Darling was appointed chief of the Biological Survey March 10, 1934, by Secretary of Agriculture Henry A. Wallace (left). **RIGHT:** Darling, photographed standing near corn stubble in South Dakota, with a double-barreled shotgun, was an energetic outdoorsman. **BELOW:** Shortly after he became chief of the Biological Survey in 1934, Darling purchased the first duck stamp, which he had designed.



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understand how to apply science to real-world conservation problems. Currently there are over 1,000 projects being conducted and over 500 graduate students enrolled nationwide in the units. In the past five years, 629 Cooperative Research Unit graduate students have successfully completed their studies, and 1,822 scientific papers have been published.

A primary mission of each unit is to address the research needs of its state fish and wildlife agency, but often several states have similar needs, and units collaborate in trans-boundary research to address these needs at landscape scales. Currently, such projects include the western elk research collaborative involving cooperative units in Montana, Wyoming, Utah, and Idaho and state fish and wildlife agencies in Montana, Wyoming, Colorado, Utah, Idaho, Oregon, and Washington. By sharing data gathered from many states, unit researchers are able to attack questions that are difficult to address with smaller data sets, such as predator/prey interactions, calf survival, pregnancy rates, impact of bark beetle infestations on elk, and hunter habitat use, and other problems. The states have expressed interest in establishing a similar collaborative for moose. States in the east are also interested in a multi-unit collaborative on moose to address declining populations in the southern ranges. Cooperative units in Kansas, New Mexico, and Texas are working with collaborators in several states to develop state-based conservation plans for the lesser prairie chicken and developing monitoring tools that can be applied at unprecedented landscape scales.

The Club's legacy with the Cooperative Fish and Wildlife Research Units did not end with its founding by Ding Darling. Both Regular and Professional Club Members have and continue to be a part of its history. For example, Regular Member William G. Sheldon, son of Charter Member Charles Sheldon became the first leader of the Massachusetts

Cooperative Wildlife Research Unit when it was established at the University of Massachusetts Amherst in 1948. Sheldon trained many students who went on to become leaders in wildlife conservation, and his pioneering studies of American woodcock came to fruition in his classic *The Book of the American Woodcock*. Sheldon would occasionally tell stories to UMass wildlife graduate students about his boyhood years, recalling sitting on the front steps of his father's home when Roosevelt and other Club members would come over to plan their fall exploits.

The late Bart O'Gara, B&C Professional Member, was assistant leader of the Montana Cooperative Wildlife Research Unit under the legendary John Craighead and succeeded Craighead as leader. O'Gara was an avid big game hunter, and his studies focused on golden eagle and coyote predation on ungulates. His book, *Pronghorn Ecology and Management*, published by the Wildlife Management Institute, is a classic. As a young wildlife biologist I had the opportunity to spend time with O'Gara. His favorite hunting dog was a poodle—he claimed it was the most versatile bird dog he ever owned, and it would hunt anything. He had a great sense of humor—and proudly displayed a photo of himself, with his broad, toothy smile, bald pate, camo hat, and dark-rimmed glasses, holding a golden eagle in one arm and the net gun he captured it with in the other. He told me he tried to get a bird club to put it on the cover of their magazine, but they refused.

Regular Member James L. Cummins, architect of the Club's current strategic plan among other leadership accomplishments, received his graduate education from the Virginia Cooperative Fish and Wildlife Research Unit at Virginia Tech in Blacksburg. The Virginia Cooperative Research Unit was one of the first established in 1935. James is also a certified wildlife biologist and a certified

fisheries scientist, credentials conveyed by The Wildlife Society and the American Fisheries Society.

Other Professional Members with unit ties include Rollie Sparrowe, who was leader of the Missouri Cooperative Wildlife Research Unit, national chief of the unit program, and president of the WMI; Steven A. Williams, who received his doctorate from the Pennsylvania Cooperative Wildlife Research Unit and is now president of WMI; and Christine L. Thomas, dean at the University of Wisconsin–Stevens Point where the Wisconsin Cooperative Fisheries Research Unit is based.

In his later years, Darling recalled the pivotal moment in his efforts to establish the Cooperative Research Units as a national program. He recalled the dinner at the Waldorf Astoria with leaders from the Sporting Arms and Ammunition Manufacturers Association. He credited C.K. Davis, the head of Remington, with stepping forward to assure the industry's support. He stated, "If I couldn't get the support of the Sporting Arms and Ammunition Manufacturers my whole house of cards was bound to collapse." And since that uncertain start, the unit program "has produced an amazing volume of original information on wildlife problems and has developed scores of new techniques in wildlife management while training literally thousands of young people for professional careers in wildlife work."¹ Indeed, since the year 2001 alone, more than 2,500 students have graduated from the unit program, with most going on to careers with state, federal, and private conservation institutions. Ding's brilliant idea has stood the test of time and will continue to serve our nation's fish and wildlife conservation legacy. ■

1. Lendt, D.L., 2001. *The Life of Jay Norwood Darling*. The Maecenas Press, Ames, Iowa, USA. Additional reference information was obtained from W.R. Goforth, 1994. *The Cooperative Fish and Wildlife Research Unit Program*. Special Publication, U.S. Department of the Interior, National Biological Survey.