U.S. Fish & Wildlife Service

# **Recovery Champions**

FY 2002



### **Acknowledgments**

The Endangered Species Program would like to thank all of the supervisors and colleagues who nominated the following individuals as Recovery Champions. Without their efforts, the hard work and dedication of these Recovery Champions would not be recognized today.

### **Dedication**

The Recovery Champions recognition effort is dedicated to LaVerne Smith and Renne Lohoefener because of their leadership in championing endangered and threatened species recovery nationally. Thank you for making recovery, "a future for our species," happen!

Cover photos (clockwise from top left)

Top portion: Northern Rocky Mountains Gray Wolf Team (clockwise from top left: Ed Bangs, Joe Fontaine, Mike Jimenez, Sharon Rose, Carter Niemeyer, and Tom Meier with Therese Hartman)

Bottom portion: Paul Nickerson, Mexican Wolf Recovery Team (from left: Dan Stark, Colleen Buchanan, Wendy Brown, Brian Kelly, Maggie Dwire), Vicki Finn, Richard Biggins, Tyler Sykes

## **Recovery Champions** *FY 2002 Leadership and Team Achievement Awards*

Recovery Champions are U.S. Fish & Wildlife Service employees who are making a difference in promoting the recovery of a single endangered or threatened species or multiple listed species. These employees are instrumental in achieving milestones to help advance a species towards recovery, anywhere on the species recovery continuum. These individuals have demonstrated significant achievements in leadership and team-building. They represent a small portion of the many hardworking Service employees dedicated to endangered and threatened species recovery throughout the Nation. We salute them for taking actions to prevent extinctions and lead progress toward recovery of our Nation's rare species!

### **Recipients:**

Northern Rocky Mountains Gray Wolf Reintroduction and Recovery Team

Mexican Wolf Reintroduction Recovery Team

Paul R. Nickerson

Richard (Dick) G. Biggins

Tyler Sykes

Vicki Finn

### Northern Rocky Mountains Gray Wolf Reintroduction and Recovery Team

Gray Wolf Recovery Office, Helena, Montana

Team Members: Ed Bangs, Gray Wolf Recovery Coordinator Joe Fontaine, Wolf Biologist, Helena, Montana Mike Jimenez, Wolf Biologist, Lander, Wyoming Tom Meier, Wolf Biologist, Kalispell, Montana Carter Niemeyer, Wolf Biologist, Boise, Idaho Sharon Rose, Information Officer, Mountain–Prairie Regional Office, Lakewood, Colorado

Ed Bangs has been behind one of the most successful recovery programs implemented by the Service. As the coordinator for gray wolf (Canis lupus) recovery efforts in the western U.S., Ed has overseen the reintroduction of experimental populations in the Yellowstone area and central Idaho, as well as the growth of the natural, endangered population in northwest Montana. Wolf reintroductions and recovery efforts have been highly successful, and populations now number over 700 in the three areas. Recovery population goals for the western **Distinct** Population Segment of grav wolves will be reached at the end of 2002, and delisting may be proposed in 2003. New packs have filled in intervening areas between the original 3 recovery areas, so the population is functioning more and more as a single population.



Clockwise from top left: Ed Bangs, Joe Fontaine, Mike Jimenez, Sharon Rose, Carter Niemeyer, and Tom Meier with Therese Hartman.

Although wolf reintroduction and management have been highly controversial, Ed and his team have acted with professionalism, responded promptly to public concerns, and have been willing to relocate or remove wolves that repeatedly attack livestock. This has earned grudging acceptance from the local communities impacted by the reintroductions. The ability of the Service team members, along with numerous seasonal employees, volunteers, employees of USDA Wildlife Services, and law enforcement officers, to rapidly respond to incidents and to work closely with landowners for long periods to improve depredation situations has allowed the program to progress to the point where wolves can be delisted and their management turned back to the States.

Behind-the-scenes, Sharon Rose has been a committed press officer who has been instrumental in securing widespread public understanding and support for wolf recovery. From the late 1980's through the late 1990's, Sharon has devoted her spare time to arranging public meetings and press briefings, the substance of public policy development. Her willingness to go "above and beyond the call of duty" has been invaluable in explaining difficult decisions in this high visibility, complex, controversial program to all interested publics. Together, the gray wolf team's hard work, attention to detail, unimpeachable honesty, and dedication are making the species' recovery attainable.

### Mexican Gray Wolf Reintroduction Team Southwest Regional Office, Albuquerque, NM

Current Team Members: Brian Kelly, Recovery Coordinator Colleen Buchanan, Captive Management Coordinator Maggie Dwire, Biologist/Outreach Specialist Dan Stark, Field Biologist

### Past Team Members:

David Parsons, Recovery Coordinator (1990-1999) Wendy Brown Field/Outreach Coordinator (1994-2001) Janet Reed, Biologist/Outreach

Specialist (1998-1999)

The reintroduction of the Mexican gray wolf (Canis lupus baileyi) is a multi-agency cooperative effort among the Service, Arizona Game and Fish Department, New Mexico Department of Game and Fish, USDA-Wildlife Services, U.S. Forest Service, the Turner Endangered Species Fund, and the White Mountain Apache Tribe. Beginning in 1991, Mexican wolf staff led the development of a comprehensive public involvement effort, culminating in a scientifically, sound reintroduction plan and Environmental Impact Statement. In March 1998, reintroduction was initiated with the release of 11 Mexican wolves from captive stock into the Apache National Forest in southeastern Arizona in March 1998. In spite of many challenges, including the shooting deaths of at least five of the initially released animals, there are now 8 packs of free-ranging Mexican wolves within the Blue Range area. These wolves, including some second and third generation wild-born animals, occupy about 7,000 square miles of historic wolf habitat.





Above, from left to right: Dan Stark, Colleen Buchanan, Wendy Brown, Brian Kelly, and Maggie Dwire.

At left: Dave Parsons and Janet Reed.

Through the strengths and persistence of each of the members and the remarkable resilience of this genetically distinct wolf subspecies, the team may achieve their recovery goal for a wild population of 100 wolves by 2008. This success would not be possible without the production of quality animals for release, thanks to the commitment of many partners in the captive management community that includes over 40 zoos and preserves managing Mexican wolves for the Service in the Species Survival Program in the U.S. and Mexico.

The Team's commitment to maintaining an open dialogue with local communities and other interested parties has been critical in allowing the Mexican wolf reintroduction to keep moving forward. The field team lives and works in the rural community, keeping one-on-one communication a priority. The Service sponsored a comprehensive Three-Year Review of the program in 2001, with participation from many stakeholders. Written *Project Updates*, biweekly *Notes from the Field*, an active web site (http:// mexicanwolf.fws.gov/), and frequent public presentations and forums are important components of the public outreach effort.

The team has excelled in coordinating across the Service, multiple state/federal agencies, and with tribal, non-governmental organizations, and the public, often under very challenging conditions. They never lose sight of the welfare of the animals as their highest priority, and they cheerfully work long and often irregular hours including many nights and weekends. Although they often have to make difficult decisions in this high visibility, complex and controversial program, they have also seen steady progress in the recovery of this unique southwestern carnivore.



**Paul R. Nickerson** Northeast Regional Office (Region 5), Hadley, Massachusetts

Paul Nickerson has made invaluable contributions to improving the viability of rare species in the Northeast and across the country. During the many years before any endangered species monies were explicitly earmarked for surveys and/or conservation of candidate species, he recognized the value of these efforts and found ways to fund them. Because of Paul's efforts, many new populations of species were located and early protection efforts initiated, thereby forestalling the need for listing. Other species were found to warrant listing and recovery actions were undertaken. Under Paul's leadership, two-thirds of the listed species for which Region 5 has lead responsibility have been restored to stable or improving status. Paul personally led the recovery effort for the peregrine falcon (Falco peregrinus anatum) and the bald eagle (Haliaeetus *leucocephalus*) in the Northeast, two of the most visible ESA successes. The bald eagle and many other wildlife species are direct beneficiaries of his successful

efforts to cancel certain uses of the pesticides carbofuran and diazinon, pesticides that have caused the death of many birds, including eagles. Over the last decade, he has marshaled his considerable experience and expertise on behalf of the last remaining wild U.S. Atlantic salmon (*Salmo salar*) population segment.

For over 25 years, Paul has ably guided the Northeast Region's endangered species program. He has built alliances with all 13 states within the region, including 27 agreements under section 6 of the ESA for conserving rare species. The benefits of these partnerships have been maximized through Paul's skill at pinpointing the least complicated, most effective, and most efficient role for each partner. His open-minded review of data, and integrity in making decisions have fostered the willingness of most parties to rely on informal channels in working with the Service to resolve rare species concerns, rather than resorting to adversarial and time-consuming processes such as petitions or citizen suits. Through all of his endeavors, Paul has gained the respect of his peers, his superiors, and of the environmental community, while keeping the "good of the resource" his highest priority. Paul is the epitome of a recovery champion.



**Richard (Dick) G. Biggins** Asheville Field Office, Asheville, North Carolina

Dick Biggins' tireless dedication to the conservation and recovery of imperiled fish and molluscs has resulted in great success. Upon joining the Asheville Field Office staff in 1980, Dick began determining the status of native fish and molluscs in North Carolina, South Carolina, Kentucky, and Tennessee. Dick has extensively documented these species: typically requiring months or years of data collection and analysis, extensive communication with species experts, careful coordination with the public and landowners, emotionally charged public hearings, and preparation of complex regulations. The protections provided by the ESA regulations that Dick has written have undoubtedly kept many species from becoming extinct. In 21 years, Dick wrote regulations protecting 29 species as threatened or endangered, more listings than any other individual. Dick has also authored, co-authored, or served as project officer for recovery plans for 42 species, more than any other individual accomplished over these years.

Because of Dick's documentation of need, the position of Fish/Mollusc Coordinator for the Southeast Region was created in 1992, one of the Region's first recovery coordinator positions. At that time, few people knew of the diversity and plight of fish and molluscs in the region, few dollars were being invested in their conservation, and no coherent strategy existed to direct their recovery. Starting with some dedicated funding provided by the Region, Dick multiplied the funds many times by developing innovative partnerships, obtaining matching funds and services from other agencies and the private sector, and infecting others with his enthusiasm for fish and mussel conservation.

In fact, partnerships and cooperation have been the hallmarks of Dick's many accomplishments. Dick worked with a variety of partners to produce a number of awardwinning slide-tape shows, videos, posters, teacher's guides, booklets, and exhibits on these imperiled species and aquatic communities. One of Dick's more notable accomplishments in education and outreach was development of an exhibit at the Tennessee Aquarium on the diversity and conservation of our aquatic communities. This exhibit is seen by over 1 million visitors each year.

As a result of Dick's early partnerships, devotion to the cause, and on-the-ground achievements, many of the species that were once highly imperiled are now being propagated and reintroduced back into restored habitat in streams throughout the Southeast.



**Tyler Sykes** Ecological Services, Cookeville, Tennessee

Tyler Sykes' career with the Fish and Wildlife Service started in 1998. In the fall of 1999, when the Cookeville Field Office was assigned recovery responsibilities for several species, Tyler was identified as the office's recovery biologist. At the time of her death in May 2002, Tyler had advanced the recovery effort in Tennessee and Kentucky far beyond what could have been expected of any Service employee. Some of the notable accomplishments by Tyler during her short tenure with the Service and involvement in the **Endangered Species Program** include significant advancements in the recovery of the Spring Creek bladderpod (Lesquerella perforata), boulder darter (Etheostoma wapiti), large-flowered skullcap (Scutellaria *montana*), Tennessee purple coneflower (Echinacea tennesseensis), Nashville cravfish (Orconectes shoupi), and Cumberland sandwort (Arenaria cumberlandensis).

As a result of Tyler's initiative, management agreements addressing the protection and enhancement of the Spring Creek bladderpod at two locations within the range of this narrowly endemic species were negotiated with two commercial enterprises. Additionally, Tyler negotiated the purchase of a tract of land for the purpose of protecting and managing a third population of the plant by the City of Lebanon. The management plans and the acquisition of land by a public entity represent the first "on-theground" actions taken to move this listed species toward recovery.

Tyler's enthusiasm for her work was also exhibited by instigating habitat improvement for the boulder darter, which resulted in the expansion of this species into a portion of its range where it had not been documented for several years. She also initiated contact with a commercial developer relative to the recovery of the Nashville crayfish and successfully shepherded the development of the first aquatic HCP in the Southeast Region.

Tyler's personality and commitment to her job allowed her to develop invaluable partnerships with numerous agencies, private individuals, and corporations. She was an outstanding Service employee who contributed significantly to recovery activities within Tennessee and Kentucky.



### Vicki Finn Pacific Regional Office (Region 1), Portland, Oregon

Vicki Finn has over 9 years of various ESA responsibilities in Region 1, including Chief of Consultation and Habitat Conservation Plans, Southern California "Geographic ARD" (which pre-dated the nationwide GARD structure), and most recently Chief of Endangered Species. Prior to her Region 1 experience, Vicki also spent 4 years in the Washington Office working on a variety of ESA program and budgetary functions. Throughout Vicki's tenure in the Pacific Region, recovery of listed species was always her number one goal. Her leadership and guidance were critical for ensuring that ESA programs maintained the overall recovery objective. She strived to ensure that every one of her staff and all the Field Offices maintained recovery as the key for measuring success.

She was also instrumental in initiating the National Recovery Initiative which was conceived during the fall of 2000, with the first "official" meeting held in April 2001. This has led to multiple efforts that the Service has undertaken nationwide to invigorate the recovery program. These efforts include setting up the first ever National Recovery Workshop, full scale activities to revise the 1990 national recovery planning guidance, and a national recovery budget initiative for FY 2004 to name a few.

Vicki's recovery commitment continues today in her new role as the Region 1 Fisheries ESA Recovery Team Leader. Even though Vicki left the Endangered Species Program, she didn't leave her recovery objective behind. She is now working for Fisheries, in close cooperation with NMFS, to ensure that they are doing all they can to recover listed aquatic species. She is also actively taking steps to promote cross-program coordination between **Endangered Species and Fisheries** by initiating meetings to discuss opportunities to pool expertise, resources, and funding to effectuate recovery actions on-the-ground with the opportunity for tangible results. We expect Vicki's success will continue far into the future. Vicki once confided to her staff that, since she was a little girl, she dreamed of recovering endangered species. Today, we want to tell Vicki that, thanks to her hard work, her dreams are coming true.

# **Recovery Champions** *FY 2002 Individual Achievement Awards*

Recovery Champions are U.S. Fish & Wildlife Service employees who are making a difference in promoting the recovery of a single endangered or threatened species or multiple listed species. These individuals have been nominated by another Service employee because s/he is or has been instrumental in achieving milestones to advance a species towards recovery, anywhere on the species recovery continuum. They represent a small portion of the many hard-working Service employees dedicated to endangered and threatened species recovery throughout the Nation. We salute them for taking actions to prevent extinctions and lead progress toward recovery of our Nation's rare species!



Alan Clark Julia Butler Hansen Refuge, Cathlamet, Washington

Al has worked his entire 26-year Service career as a biologist at the Julia Butler Hansen Refuge for the Columbian White-tailed (CWT) Deer (*Odocoileus virginianus leucurus*), focusing on the deer's recovery. During that time, Al contributed significantly to the scientific body of information on CWT Deer, which enabled the writing of recovery, predator control, relocation, and habitat management plans and associated environmental compliance paperwork and permits.

Because of Al's efforts, partnerships have developed among the Oregon and Washington state wildlife and land management agencies, a land trust, two timber corporations, private landowners, and the refuge to expand the range and numbers of CWT Deer on secure habitat within their historic range. With the success of the recent relocation efforts, the last necessary relocation effort is scheduled to begin this December. If successful, recovery goals established in the recovery plan for this species will have been met.



Alison Whitlock Northeast Region (Region 5), Hadley, Massachusetts

Alison has been one of the Service's leading advocates for bog turtle (*Clemmys muhlenbergii*) recovery. It is unlikely that anyone in the region knows as much about bog turtle natural history and conservation in New England. Alison has taken her knowledge of bog turtles in New England and brought it to the Wallkill River and Shawangunk Grasslands National Wildlife Refuges.

Alison has trained staff on bog turtle conservation, provided support that led to ecosystem team funding to conduct population status surveys and purchase radio telemetry equipment to track turtles, given instruction on the use of radio telemetry equipment, and conducted surveys for bog turtles at Shawangunk Grasslands NWR. She also served as the principal author on the preliminary project proposal for the expansion of the Wallkill River NWR, which, if fully implemented, will protect 21 bog turtle population analysis sites. She has forged partnerships with state and non-governmental organizations,

particularly The Nature Conservancy and both the New York and New Jersey fish and wildlife departments. Alison's efforts are definitely making a difference and will assist in the recovery of this species.



Andrea Pickart Humboldt Bay National Wildlife Refuge, Loleta, California

As Humboldt Bay NWR's Ecologist, Andrea has been a longtime advocate for coastal sand dune ecosystems in California. Andrea formerly was employed by The Nature Conservancy, where she spearheaded the restoration of the Lanphere Dunes on Humboldt Bay's north spit, which later became part of the Service's refuge system. Not only did the Service obtain possession of a restored coastal dune system, we also got Andrea and her invaluable expertise.

Andrea's work to restore and maintain coastal dune systems has benefitted dune mat, coastal dune forests, and dune hollow communities. Also benefitting from her restoration efforts are two federally endangered plants, the Menzies' wallflower (*Erysimum menziesii*) and the beach layia (*Layia carnosa*). Andrea is also actively implementing recovery actions for both listed plants in coordination with Humboldt State University, the California Native Plant Society, and the Society for Ecological Restoration. These actions include genetics work, maintaining restored habitats, and researching methodologies to control exotic plants. Andrea has authored and illustrated several books and other publications based on her successful research and management of coastal sand dune ecosystems. She founded the local Dunes Forum (a citizen and government action group), actively plays a lead role in the Weed Management Area, and works with the non-profit group, Friends of the Dunes.



Andy Moser Chesapeake Bay Field Office, Annapolis, Maryland

George Andrew (Andy) Moser has worked on the recovery of listed species since shortly after the original authorization of the Endangered Species Act in 1973. Andy has prepared listing packages for fish, mussels, snails, crustaceans, and plants. He then served as Recovery Coordinator for many species at various points in time, including the Puritan and Northeastern tiger beetles (Cicindela puritana and Cicindela dorsalis dorsalis), Maryland darter (*Etheostoma sellare*), and Peter's Mountain mallow (Iliamna corei). Andy's activities as recovery coordinator for this broad range of species have engaged many partners, including state agencies in Maryland, Delaware, Virginia, and West Virginia, National Wildlife Refuges, and other federal agencies including the National Park Service and the U.S. Forest Service. Andy has also contributed to recovery by working with candidate species, developing conservation agreements with the U.S. Forest Service for the Cow Knob and Peaks of Otter salamanders, and coordinating conservation of the Holsinger's cave beetle (Pseudanophthalmus holsingeri). Andy has served long and well, often with little recognition for helping conserve little known listed species. The Recovery Champion award is a fitting and well-deserved tribute to his contributions to recovery throughout the Chesapeake Bay region.



Anne Hecht Northeast Regional Office (Region 5), Hadley, Massachusetts

Anne has worked tirelessly for 17 years to conserve and protect the piping plover (*Charadrius melodus*) in Region 5 and beyond. First assigned to the recovery team early in 1986, she began her efforts by working with the Region 5 refuge mangers to design and implement better means of plover protection on refuge beaches. As productivity on refuges began improving, she broadened the stakeholder groups to include states, other federal agencies (e.g., the National Park Service), local governments, and the private sector. Piping plover numbers continued to climb, and the commitment to plover protection widened, becoming more acceptable to the various parties.

Later, she became recovery team leader and, along with her team, revised the plan in 1996. Recovery goals were redefined, guidelines regarding take were appended, and the plan became considered by many as an example of "cutting edge" recovery planning. Anne has also worked closely with several other regions to review biological opinions, comment on draft research proposals, assist in drafting critical habitat proposals for wintering birds, and led national plover symposia at the National Conservation Training Center. Plover populations have improved markedly during her watch, and the species clearly is much closer to recovery than at the outset of her involvement.



Annette Scherer New Jersey Field Office, Pleasantville, New Jersey

Annette Scherer has been instrumental in the recovery of several federally listed species, particularly the endangered Indiana bat (*Myotis sodalis*), threatened piping plover (Charadrius melodus), threatened northeastern beach tiger beetle (Cicindela dorsalis dorsalis), and the threatened plant, seabeach amaranth (Amaranthus pumilus). The latter three species inhabit New Jersey's Atlantic Coast, where development and recreational activities are intense. Through personal credibility and collaborative leadership, Annette has engaged others, including state and municipal representatives, numerous other federal agencies, The Nature Conservancy, The Wetlands Institute, and private landowners, in numerous recovery efforts. Annette has served on the organizational committee for the first National Symposium on the Indiana bat, a species which she helped document its first known breeding occurrence within New Jersey. Annette has also worked with the Army Corps of Engineering to manage beach replenishment and management cooperatively with piping plover nesting and foraging habitat. She completed a reintroduction of

northeastern beach tiger beetles and documented range expansion of the seabeach amaranth into three new counties, comprising over 90 miles. Where tourism is the major industry along the New Jersey shore, Annette has been effective in transforming new beach management ideas to inspire on-theground actions to benefit New Jersey's listed species.



**Baron Horiuchi** 

Hakalau Forest National Wildlife Refuge, Hilo, Hawaii

Since 1997, Refuge Horticulturist Baron Horiuchi has done an outstanding job in aiding in the recovery of rare and endangered plants at Hakalau Forest National Wildlife Refuge on the Big Island of Hawaii. Baron has proven himself to be a "horticulturist extraordinare." He has germinated seeds from endangered plants never before propagated and continues to actively find new ways to germinate, propagate, and out-plant rare and endangered plant species. Due to Baron's persistence and ingenuity, endangered plants such as Cyanea shipmannii, with only 3 known individuals in the wild, have been increased 30-fold, elevating their potential for recovery and reducing their risk of extinction. Through his

exceptional experience in plant propagation, over 1,500 endangered plants of 6 species, including 2 species that have 3 or less individuals remaining in the wild, were propagated from seeds and cuttings, greenhouse grown, and out-planted into protected areas, preventing their possible extinction and aiding greatly towards their future recovery.

In addition, Baron champions the refuge's volunteer program by supervising hundreds of volunteers each year who assist in refuge reforestation and endangered plant restoration programs. Volunteers seek out Baron from throughout the Hawaiian Islands and the mainland just to work with and learn from him.



Bill M. Giese Chesapeake Marshlands NWR Complex (Blackwater, Martin, Susquehanna NWRs), Cambridge, Maryland

William (Bill) Giese has been an extremely important member of the Delmarva Fox Squirrel (DFS) (*Sciurus niger cinereus*) Recovery Team since its re-establishment in 1987 (15 years). His intimate knowledge of the squirrel's life history, behavior, and habitat requirements; survey methods and techniques; and threats associated with the squirrel throughout its range have been critical to the development and implementation of the recovery plan goals, objectives, and strategies. Bill has been most instrumental in maintaining continuity and institutional memory for DFS recovery activities from a Service perspective. He has been a moderating influence with the state and non-federal Recovery Team participants. Bill has been a key person in development of public understanding through direct and regular contact with the private sector. As a native Eastern Shoreman, his involvement as President of the Dorchester County Soil Conservation District and Governor-appointed representative on the Critical Areas Commission have been significant assets to implementation of the Service's recovery efforts. Overall, Bill has greatly exceeded the expectations of his original technical involvement in the recovery of this species by taking a significant leadership role for the Service, providing the liaison and inter-program contacts so critical to effective implementation of recovery strategies.



### Bill Schultz

Chesapeake Bay Field Office, Annapolis, Maryland

Bill has demonstrated self motivation and leadership while working with the Partners for Fish and Wildlife program. In concert with the Maryland Department of Natural Resources and the Baltimore Aquarium, he assessed the quality of northern bog turtle (Clemmys muhlenbergii) habitats and populations in three central Maryland counties. Subsequently, Bill worked with a sense of urgency to address the loss of habitat quality. which appears to be a major contributor in the decline of local bog turtle populations. The colonization of historic bog turtle wetlands by invasive woody and herbaceous species in association with hydrology modifications has significantly degraded the quality of these habitats.

Bill enlisted the assistance of the Chesapeake Bay Field Office's Endangered Species and Environmental Contaminants programs to develop a strategy for combating the continued proliferation of invasive plant species. Through perseverance and patience, he was able to garner support for the use of selective herbicides to eliminate woody invasive species, thereby restoring native plant communities. With improved hydrology and the reestablishment of the native forb vegetation, the prognosis for these historic bog turtle habitats to aid recovery is very positive, thanks in no small measure to Bill's concern and dedication.

Billy Brooks Jacksonville Field Office, Jacksonville, Florida

Billy Brooks describes himself as a "coastal ecologist" who has developed a keen understanding of the recovery needs of many coastal endangered species. He has spent his career conducting research, rescuing, developing management plans for, and working on the recovery of several listed species, including one of the rarest, yet largest, endangered species, the Northern right whale (Balaena glacialis), and one of the smallest coastal mammals, the Anastasia Island beach mouse (Peromyscus polionotus phasma). He has also facilitated recovery for several plant species.

Billy started his endangered species work on loggerhead sea turtles (*Caretta caretta*) in North Carolina and is now fulfilling one of his graduate school dreams of working with birds, as he has the lead in facilitating wood stork (*Mycteria americana*) recovery. Having worked on a variety of recovery efforts, recovery teams, working groups, task forces, and implementation teams, Billy has developed the expertise and skills to help such groups to focus and work towards common goals necessary to aim for recovery.



**Bruce Rosenlund** Colorado Fish and Wildlife Management Assistance Office, Lakewood, Colorado

While it is always a bit of a stretch to say one person saved a particular species single-handedly, in the case of Bruce Rosenlund, Service biologist and Project Leader of the Colorado Fish & Wildlife Management Assistance Office who has been working on the Colorado greenback cutthroat trout (Oncorhynchus clarki stomias), it would be only the most minimal stretch. Bruce has been the species' single most visible and effective champion for nearly 20 years now. And in that score of years, he has witnessed almost every conceivable set-back a recovery biologist could face: erratic to non-existent budgets, unpredictable "partners," genetic

contamination, unchecked disease threats, and wavering public support.

Bruce and the greenbacks successfully weathered each challenge. One of the reasons is that, early on, Bruce was out in the field meeting people, making friends, building networks, and *listening*—in effect, creating true and lasting partnerships. His coalition-building and outreach efforts brought together support from such varied sources as the fly-fishing writer John Gierach to the U.S. Army, from the Colorado Division of Wildlife to Trout Unlimited chapters scattered across Colorado, and from individual ranchers to corporate executives. resulting in bringing a species well on its way to recovery.



Cary Norquist Jackson Field Office, Jackson, Mississippi

As a botanist for the Service, Cary Norquist has made significant contributions toward the recovery of listed plants in the Southeast. Most notably have been her successes related to the recovery of two endangered plants: the green pitcher plant (*Sarracenia oreophila*) and the Alabama canebrake pitcher plant (*Sarracenia rubra* ssp. alabamensis). Cary has worked with private landowners, state agencies, other federal agencies, and conservation organizations towards the recovery of both unique species for over 10 years. The protection of listed plants on private lands presents a unique challenge due to the minimal protection for listed plants on private lands. Cary has worked with private landowners and developed agreements to promote the voluntary protection and management of significant populations under private ownership. Currently, there are Conservation Agreements in effect with landowners for 10 populations of the green pitcher plant in Alabama and three for the Alabama canebrake pitcher plant. Surveys, monitoring, species biology studies, and active management are all part of ongoing recovery efforts for these species. The Alabama Natural Heritage Program has been an active partner in the recovery of these species. The efforts of this state program together with Cary's has helped to increase the number of populations of both species since their listing.



**Craig Koppie** Chesapeake Bay Field Office, Annapolis, Maryland

Craig Koppie has demonstrated an active and long-term commitment to the conservation of rare raptors, particularly American peregrine falcons (Falco peregrinus anatum) and bald eagles (Haliaeetus leucocephalus). Craig has worked on the recovery of peregrines since their listing as an endangered species in 1977 and is aiding the monitoring of this species now that it is delisted. Craig served as the mid-Atlantic Peregrine Falcon Coordinator for the Service and has partnered with the World Center for Birds of Prey and the state natural resource agencies in Maryland, Virginia, Delaware, West Virginia, and DC, and with private entities, such as Dominion Power. Craig's substantial contributions to the recovery of federally threatened bald eagles include the reintroduction of bald eagles in several states through the Chesapeake Bay Bald Eagle project, assisting with nest monitoring, telemetry, prey studies, contaminant evaluations, and banding. Craig has worked with the Earth Conservation Corps, Tri-State Bird Rescue and Research, Baltimore Zoo, Virginia Wildlife Center, federal and state agencies, and other partners on

recovery and protection tasks. Furthermore, Craig has consistently endeavored to include public education and outreach components into his work with bald eagles and peregrines, improving the level of understanding the public has for Service recovery programs.



#### D'aun (Deedee) Roberts

Saratoga National Fish Hatchery, Saratoga, Wyoming

D'aun (Deedee) Roberts has devoted a considerable amount of time and help in every aspect of recovery from captive breeding and reintroduction efforts to outreach to assistance to the Wyoming Toad (Bufo baxteri) Recovery Team. Deedee's initiative in applying for grant monies has been rewarded by three new grants: one for a captive water quality assessment; another for a vitamin A analysis from the Platte/Kansas Rivers Ecosystem Team; and a third grant to survey the Laramie Basin for the amphibian chytrid fungus (a challenge cost-share grant obtained by Deedee and Greg Langer of the Arapaho National Wildlife Refuge). The information gained from this research will be invaluable as the Service begins to identify new release sites for the Wyoming toad.

Deedee has also been a vital member of the Species Survival Plan and the Wyoming Toad Recovery Team Technical Advisory Group. Often times she will go far beyond the call of duty "for the sake of the toad." She has spent a considerable amount of time and effort assisting with the revision of the current Wyoming Toad Recovery Plan. Her enthusiasm and knowledge of the species is evident. Deedee's efforts are playing an integral role in the recovery of the Wyoming toad.



David M. Richardson Noxubee National Wildlife Refuge, Brooksville, Mississippi

David Richardson works as the Wildlife Biologist for Noxubee NWR, and he also serves collaterally as the Red-cockaded Woodpecker (Picoides borealis) Coordinator for refuges in the Southeast. As Refuge RCW Coordinator, he facilitates RCW recovery work at 9 separate refuges, totaling more than 300,000 acres. Through his position, David experiments constantly with new techniques for managing RCWs. He led the way in using electronic "peeper" scopes to monitor nests, thereby saving RCW managers thousands of hours each year on this time-consuming activity. He has also been at the forefront in developing

better designs and materials for cavity inserts, restrictors, and excluder devices. Since the time he began working at Noxubee NWR, he has increased that station's RCW population from 12 to 42 groups. His efforts at other stations have yielded similar population increases. David has facilitated many partnerships to conserve RCWs including a landmark cooperative MOU with Georgia Pacific in the early 1990s that allowed Service monitoring and assistance of birds on their land. Many later MOUs were based on this original one. Overall, David has shown outstanding dedication to recovering RCWs. His work has emphasized practical methods to manage and restore the species throughout its original range.



Dawn Zattau Jacksonville Field Office, Jacksonville, Florida

Dawn Zattau has been involved in the recovery program since 1991. She won a Regional Director's Honor Award for developing and carrying out an initiative to make residents and policy makers in the State of Florida aware of the fragile scrub ecosystem, which serves as home to the Florida scrub-jay (*Aphelocoma coerulescens*) and over two dozen other federally listed species. Dawn has successfully assisted the Division of Law Enforcement and the Department of Justice in prosecuting developers who cleared scrub habitat without authorization. She has reached out to partners, now numbering in the hundreds, to see that scrub receives the attention necessary to make great strides toward recovery. From disseminating information through Saving Our Scrub newsletter to providing a listserver for those interested in communicating about scrub issues to hosting a wellattended scrub symposium and publishing the proceedings, Dawn has seen to it that those interested in scrub have the knowledge they need to accomplish recovery objectives. Through a partnership with The Nature Conservancy, a Fire Strike Team has been formed that has proven successful in overcoming many of the obstacles in the way of restoring the fire-dependent scrub ecosystem.



**Deborah Fuller** Louisiana Field Office, Lafayette, Louisiana

Deborah Fuller has done an outstanding job of coordinating the recovery of the threatened Louisiana black bear (*Ursus americanus luteolus*) over the last 3 years. Her

collaboration with the Black Bear Conservation Committee, state and federal agencies, university researchers, private landowners, and numerous Service field stations and regional staff has been truly exemplary. She has been a behindthe-scenes champion, working hard to reconcile disagreements and divergent viewpoints among various recovery cooperators, while advocating for habitat restoration for the black bear. Her leadership in a major ongoing repatriation project (initiated in 1999) to re-establish the Louisiana black bear in over 100,000 acres of suitable but unoccupied habitat has been especially notable. She is always guided by sound science and has consistently advocated appropriate standards of performance for that project in her dealings with various federal, state, and private partners. Her skill in establishing and use of geographic information systems has greatly facilitated development of maps that are being used by the Service and other agencies to prioritize habitat restoration projects to benefit Louisiana black bears. She has also strongly advocated increased public outreach in the repatriation area to inform and facilitate the support of area landowners and hunters.



**Doreen Stadtlander** Carlsbad Fish and Wildlife Office, Carlsbad, California

Even before she started with the Service in 1990. Doreen Stadtlander had been monitoring and working with California least terns (Sterna antillarum browni). She has put her knowledge to work in her efforts with the California State Parks, U.S. Marine Corps, California Department of Fish and Game, U.S. Navy, and local jurisdictions. Through her efforts and with the help from the many collaborating stakeholders, the nesting colony at Huntington Beach State Park has increased from approximately 250 pairs in 1993 to about 450 pairs in 2000. Additionally, she has worked tirelessly with the Marine Corps at Camp Pendleton. The combined efforts there have shown an increase in the tern population from 363 pairs in 1995 to 672 in 1999.

Doreen, along with Martin Kenny and Jack Fancher, both Recovery Champions from the Carlsbad Office, has contributed leadership to the Service's moderating role in the California least tern working group. "It is very important to facilitate the process," Doreen said recently. "We (the Service) can't do it alone."



**Ed EuDaly** Charleston Field Office, Charleston, South Carolina

A low-growing, fleshy plant, once abundant on beaches from Cape Cod, Massachusetts, to Charleston, South Carolina, the seabeach amaranth (Amaranthus pumilus) was extirpated from much of its range by the mid 1990s. In the spring of 2000, Ed EuDaly partnered with the South Carolina Department of Natural Resources and South Carolina State Parks to establish restoration sites for the seabeach amaranth at Cape Romain National Wildlife Refuge and Huntington Beach State Park. The restoration efforts have consisted of transplanting seedlings into accreting, south-facing beaches, with small sand ridges and wrack linesideal seabeach amaranth habitat. Since restoration efforts began, data from Cape Island within Cape **Romain National Wildlife Refuge** shows that propagation/ transplantation methods have been successful. Only 1 wild plant was found on Cape Island in 2000 before transplantation began. With the introduction of 1176 transplantations that year, a total of 329 wild plants were discovered during 2001 surveys. Ed's work establishing seabeach amaranth restoration techniques shows that populations of

the plant can be augmented or re-established. Without Ed's efforts, extirpation of the seabeach amaranth from South Carolina is quite possible, due to the amount of threats facing the survival of this small plant, an integral part of the barrier island ecosystem. holding and breeding capacity of the hatchery. This building was erected in 1999. Under the direct guidance of Ed, the Saratoga hatchery has produced the majority of toads being released at Mortenson Lake for the last three years. In fact, they produced 7, 074 of the 8,338 animals released during 2001. Overall, Ed's efforts are playing an integral role in the recovery of the Wyoming toad.



Ed Stege Saratoga National Fish Hatchery, Saratoga, Wyoming

Ed Stege has contributed a considerable amount of effort and time to the recovery of the Wyoming toad (*Bufo baxteri*). In addition to his work on the toad, Ed has also been managing brood stocks of brown trout, greenback cutthroat trout, and lake trout, and he has been participating in the Great Lakes Restoration Project.

As hatchery manager, Ed has been responsible for overseeing all aspects of the captive propagation efforts of the Wyoming toad at Saratoga. Although the hatchery does not receive any additional funding for their involvement in the recovery program, Ed has conducted a variety of tasks to make this endeavor a successful one. For instance, he pursued funding for an amphibian holding center and fish isolation building to increase the



**G. Vernon Byrd** Alaska Maritime National Wildlife Refuge, Homer, Alaska

Throughout Vernon's career, he has demonstrated a high level of scientific credibility, management skill, and diplomacy that has made him a leader within the National Wildlife Refuge System and within the larger scientific community. Vernon continues to demonstrate leadership through his management and supervision of the Alaska Maritime Refuge's biological program and through his involvement on numerous agency and interagency teams and with university studies. What was perhaps the biggest success of Vernon's career occurred in 2001 with the removal of the Aleutian Canada goose (Branta canadensis leucopareia) from the threatened and endangered species list after

more than 20 years of efforts to remove nonnative arctic foxes from nesting islands and translocate geese to fox free islands. The Aleutian Canada goose population was estimated at fewer than 330 birds in 1967, and it was listed under the Endangered Species Act in 1973. In 2001, there were nearly 30,000 Aleutian Canada geese in Alaska! For most of the 20-year recovery effort, Vernon was the leader of the interagency recovery team and the field efforts. Vernon's leadership can be credited with the successful implementation of a recovery plan that incorporated objectives from diverse interests and spanned multiple regions of the Fish and Wildlife Service, multiple states, and several countries.



**Geoffrey (Jed) Wright** Gulf of Maine Coastal Program, Falmouth, Maine

Geoffrey (Jed) Wright has been instrumental in developing and implementing a very successful partnership program to protect and restore Atlantic salmon (*Salmo salar*) habitat in eight Gulf of Maine rivers. He is the Service officer for the Maine Atlantic Salmon Conservation Fund, a \$1,000,000 grant program administered by the Gulf of Maine Coastal Program Office. Jed also is the project officer for the Private Landowner Incentive Program grant for restoration of Atlantic salmon habitat and he has assisted the State of Maine with its Endangered Species Recovery Land Acquisition Grant for the Machias River protection project. The Machias River project will permanently protect 86 percent of Atlantic salmon habitat in a single river system. This represents 20 percent of the remaining wild Atlantic salmon spawning and nursery habitat in the country.

Jed's assistance to land trusts and state partners has lead to the permanent protection of over 16,000 acres of riparian land. He has shown remarkable leadership skills in implementing salmon conservation activities by working with a large, diverse group of partners all along the coast of Maine. His organizational skills, combined with his personable approach and resource ethic, has enabled Jed to be an unsung hero in the cause for salmon conservation.



**Gregory R. Balogh** Anchorage Fish and Wildlife Field Office, Anchorage, Alaska

As the lead Endangered Species biologist for the Anchorage Fish and Wildlife Field Office, Greg has been an inspirational force in recovery and consultation efforts throughout the region. His innovative and partner-oriented approaches have led to significant progress in the recovery of the endangered shorttailed albatross (Phoebastria albatrus). Identifying the urgent need to prevent the incidental take of 17,000 seabirds each year from Alaskan longline fishing practices, Greg initiated a multi-faceted program to effectively address and hopefully eliminate the problem of seabird bycatch. Showing tremendous leadership and initiative, Greg has carefully nurtured and built partnerships with a variety of federal and state agencies, industries, fishing interest groups, and universities to better understand fishing operations and constraints, to ensure that seabird deterrent devices do not interfere with fishing activities but DO prevent the incidental take of seabirds, and to inform the fishing community and others. Today, no known short-tailed albatross have been incidentally caught in Alaska fisheries since 1998, and seabird

bycatch overall was down 90 percent as of May 2002 compared to May 1998. Today, the population of the short-tailed albatross, which numbered only about 400 individuals 5 years ago, is estimated to be 1,680. Greg is certainly one of the Service's Recovery Champions!



**Gregory (Greg) Beatty** *Phoenix Field Office, Phoenix, Arizona* 

Over the past 10 years, Greg Beatty has combined his technical expertise with his outstanding people skills to gain respect for his recommendations and support from a diversity of interests and individuals. This success has resulted in major strides in the recovery of the bald eagle (*Haliaeetus leucocephalus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) in Arizona. With his calm demeanor and understated manner, he minimizes conflict and maximizes coordination.

Specifically, Greg was the "spark plug" in the bald eagle nest watch program in Arizona, which played a large part in almost doubling the number of nesting Arizona eagles in recent years. This has resulted in meeting and exceeding the goals set in the recovery plan to down-list this species to threatened. Greg personally organized and ran the nest watch program each year for approximately 10 years. His remarkable efforts involved close coordination with Native American tribes, numerous state and federal agencies, as well as private landowners. Greg is now the lead Service biologist for the southwestern willow flycatcher. He has channeled the same energy and people skills that he used to help recover the bald eagle into helping to recover this species.



**Heather Bell** Sacramento Fish and Wildlife Office, Sacramento, California

Heather Bell is a role model, a pioneer, and a trail-blazing advocate for saving endangered wildlife. A senior biologist for the Sacramento Fish and Wildlife Office's Recovery Branch, Heather has inspired her colleagues by her untiring efforts to save one of California's mostimperiled creatures, the endangered riparian brush rabbit (Sylvilagus bachmani riparius) of California's Central Valley. Among other things, Heather wrote the listing package, wrote the recovery plan, and has been tireless in implementing the plan. She launched an innovative captive-breeding program, and is

working with funding partners, landowners, state and federal agencies, and the National Wildlife Refuge System to restore riverside forests for the rabbit in the Central Valley. From an initial population of less than 200 individuals, Heather's captive-breeding program (a first for an endangered mammal native to California) has produced 40 young rabbits in the first few months. Twenty-four bunnies have been released into restored habitat areas at the San Joaquin National Wildlife Refuge and more are on the way. This is only the second time a captive-reared listed species has been released in the wild in California (the first being the California condor). Heather epitomizes a Fish and Wildlife Service biologist taking action to have a positive impact on conservation.



Jack Fancher Carlsbad Fish and Wildlife Office, Carlsbad, California

Jack Fancher has worked for the Service in southern California for 24 years and has directed the Coastal Program for the last 10 years. Jack has worked with a diverse group of partners to further the recovery of the California least tern (*Sterna antillarum browni*), western snowy plover (*Charadrius alexandrinus*  *nivosus*), and light-footed clapper rail (*Rallus longirostris levipes*). For example, he has worked closely with the Port of Los Angeles to protect and manage their nesting colony, and it has been among the top ten largest in the state for several years. He is a recognized expert on these species and has authored or coauthored scientific papers on these species as well as aided in the update of the recovery plan for the California least tern.

Through the Coastal Program, Jack has conducted nest site monitoring and was responsible for the doubling in size of the Huntington Beach nesting site and the creation of the Newport Slough and Batiquitos Lagoon nesting areas. Jack has played an instrumental role in largescale wetland restoration for San Dieguito and Batiquitos Lagoons, Newport Slough, and Blosa Chica. The completed Batiquitos Lagoon restoration plan provided immediate and substantial benefits to nesting California least terns and western snowy plovers.



**Jim Watkins** Arcata Fish and Wildlife Office, Arcata, California

During his tenure with the Service in California, Jim has taken a strong interest in coastal issues. In particular, he has been active in the conservation of listed species dependent upon coastal habitats, such as the least tern (Sterna antillarum browni) and the western snowy plover (Charadrius alexandrinus nivosus). While at the Ventura Fish and Wildlife Office, Jim initiated conservation efforts with Vandenberg Air Force Base and others to minimize impacts and promote habitat conservation for terns and plovers on military lands.

Over the past 4 years, while working in the Arcata Fish and Wildlife Office, Jim has led efforts to conserve and recover the western snowy plover along California's north coast. His continuing efforts include coordination with a variety of local governmental agencies, including California State Parks, Coastal Commission, Department of Fish and Game, County of Humboldt, and the Bureau of Land Management, plus several nongovernmental groups, such as the Friends of the Dunes and Northcoast Environmental Center. Jim has also worked closely with the Army Corps

of Engineers, local industry groups, and their consultants to acquire local information critical to our understanding of seasonal habitat use on river gravel bars, a nesting habitat unique to the coastal population of western snowy plovers.



John Coll Fish Health Unit, Northeast Fishery Center, Lamar, Pennsylvania

John has been a Region 5 fish health biologist for over 14 years and has served as the Project Leader of the Region 5 Fish Health Unit for the last 6 years. During his tenure, John has played a primary role in the formulation of policy regarding all aspects of disease prevention, abatement, and treatment coincident with Service efforts to restore Atlantic salmon (Salmo salar) in New England rivers. The Region 5 Fish Health program for Atlantic salmon restoration involves a complex partnership between federal, state, international, and commercial interests that continually seeks to stay abreast of newly introduced diseases and works to minimize the opportunities for the spread of diseases. Many challenges exist in light of the expanding interests in commercial fish farming, restoration stocking, and the transfer of wild and cultured fish and

eggs between various facilities throughout the region. John's leadership in developing protocols that prevent the potentially catastrophic introductions of pathogens between facilities and river systems has been invaluable. His professionalism and cooperative spirit have greatly enhanced the ability of the Service to garner support from partners and stakeholders in reaching the common goal of restoring Atlantic salmon to New England rivers.



**John Morgart** Cabeza Prieta National Wildlife Refuge, Ajo, Arizona

John Morgart heads the collaborative Recovery Team for the Sonoran pronghorn (Antilocapra americana sonoriensis) that includes scientists from both sides of the border: Arizona Game and Fish Department, Organ Pipe Cactus National Monument, Bureau of Land Management, U.S. Air Force, U.S. Marine Corps, the University of Arizona, El Pinacate Biosphere Reserve, and the Instituto del Medio Ambiente y el Desarrollo Sustentable de Estatio de Sonora. Recent establishment of effective partnerships within Mexico has occurred primarily because of John's extraordinary efforts.

While already a difficult recovery effort, the Sonoran pronghorn's tenuous status has recently worsened due to an extended drought along the U.S.-Mexico Border. Throughout this stressful period, John has maintained vigil over the pronghorn herd. On many occasions, John and colleagues from the Arizona Game and Fish Department have backpacked a few gallons of water across the harsh desert to thirsty and emaciated pronghorn. John continues to lead efforts with the partners to address the emergency conditions by establishing additional forage enhancement sites and constructing emergency water sources. Through John's continued leadership, professionalism, and commitment, there is reason to believe that Sonoran pronghorn will remain a part of the southwestern landscape.

*extimus*) by securing quality habitat, and he has created more than 100 acres of habitat at the Bosque del Apache and Sevilleta refuges specifically designated for the threatened bird. Although flycatcher populations have fluctuated at Bosque del Apache, the awareness of this species and its needs has been greatly increased both on and off the refuge. He has increased awareness among the Service personnel that work on the refuge as well as among the local public. He has consulted with a number of private landowners and other federal agencies relative to the flycatcher. John has also worked with the Rio Grande silvery minnow (Hybognathus amarus), trying to adjust water operations at Bosque del Apache to accommodate the need for water in the Rio Grande for the listed fish.



John P. Taylor Bosque del Apache National Wildlife Refuge, Socorro, New Mexico

John has been working at Bosque del Apache National Wildlife Refuge in New Mexico for 15 years and has worked on endangered species recovery directly for at least the past 10 years. He has worked extensively with the southwestern willow flycatcher (*Empidonax traillii* 

John Robinette Savannah Coastal Refuges, Savannah, Georgia

Since 1988, John Robinette has been instrumental in the on-going recovery of the endangered wood stork (*Mycteria americana*). Beginning in 1988, when 18 pair of wood storks established a rookery at Harris Neck National Wildlife Refuge, John has worked diligently to ensure the success of that rookery

and apply information gathered there to benefit the wood stork on public and privately owned areas. The rookery has grown to over 330 nests and is the largest in Georgia (over 1/4 of all nests in Georgia). In 2002, the rookery produced 657 chicks to fledgling stage, and over the last 6 years it has produced 1,991 fledglings. Due to John's work, the per nest fledgling rate is approximately 20 percent above that of nests in other rookeries. John has been instrumental in developing a working recovery partnership among the Service, Georgia Department of Natural Resources, University of Georgia, South Carolina Department of Natural Resources, Savannah River Ecological Laboratory, and other organizations and private companies. In addition, John's abilities go far beyond his knowledge of the scientific realm. John's kindred personality affords him the ability to inform others, create partnerships, and produce advocates for the Service mission.



Joy Albertson San Francisco Bay National Wildlife Refuge Complex, Fremont, California

Joy has been working on recovery efforts for two endangered tidal salt marsh species, the California clapper rail (Rallus longirostris obsoletus) and the salt marsh harvest mouse (Reithrodontomys raviventris), since 1989 when she began her work at San Francisco Bay NWR as a Student Conservation Association volunteer. Some examples of Joy's actions as a biologist at the refuge to benefit endangered species are her spearheading of efforts to control nonnative plant species that degrade habitat; refining water management of harvest mouse strongholds; directing predator management activities to protect endangered species; leading annual clapper rail monitoring efforts; and serving as technical advisor on several major tidal marsh restoration projects. California clapper rail populations have positively responded, rebounding from a low of 600 individuals in 1990 to an estimated 1,200 today.

Joy leads by example, by being a strong advocate, and by her technical expertise. Because she is recognized within the Service and by numerous outside agencies and groups as the California clapper rail expert, she has participated in many cooperative and landscape level efforts to conserve and recover tidal wetland dependent species. In fact, Joy is regarded as the "Ann Landers" of tidal wetland species. When people need advice on how to solve a problem about these creatures, they call Joy.



### **Jude Smith**

New Mexico Fishery Resources Office, Albuquerque, New Mexico

Jude serves as the Rio Grande Silvery Minnow (Hybognathus amarus) Rescue Coordinator in the New Mexico Fishery Resources Office. He is responsible for all minnow rescues and salvage operations when low flows make such measures necessary. The silvery minnow was listed as endangered in 1994 due to severe reduction in distribution and habitat quality caused by flow reductions, alterations of the natural hydrograph, channelization, levee construction, contaminants, and introduction of nonnative fishes.

Jude's efforts since 1999 have improved the minnow's population size and distribution. He organized minnow egg collection efforts, which in 2002 provided almost a million eggs for captive propagation. Some of the offspring were recently reintroduced into the Rio Grande near Albuquerque. Jude's ability to communicate with staff from other federal agencies, state agencies, the irrigation district, and individual members of the public has contributed to support for recovery of the minnow. He has gained the respect of all stakeholders in the Middle Rio Grande of New Mexico, and his reputation and hard work have enabled the Service to speak with a voice of reason and credibility. Jude's energy and dedication have helped safeguard the silvery minnow from extinction and earned the Service a great deal of respect.



Larry Wargowsky Necedah National Wildlife Refuge, Necedah, Wisconsin

As refuge manager at Necedah NWR in Wisconsin, Larry has taken the lead in coordinating activities on the refuge pertaining to the reintroduction of the eastern migratory flock of whooping cranes (*Grus americana*). He has been involved with the project since Necedah was selected as a reintroduction site in 1998. Last year, the first whooping cranes to migrate over the eastern U.S. in nearly 100 years followed an ultralight airplane from Necedah to Chassahowitzka Refuge in Florida. Five returned unguided this past spring. Seventeen cranes will be led south this fall.

Larry has spent considerable time and energy coordinating the work of the numerous state and federal agencies and non-profit organizations that are members of the Whooping Crane Eastern Partnership. He has displayed an ability to foster a spirit of cooperation and make all participants feel valued. There has been great public interest in the project and extensive coverage in the media. Larry has overseen daily project operations each summer and served as project spokesperson for the Service. He has also worked closely with the Friends of Necedah, which has received grants to purchase radio transmitters for the project and build additional training sites and a permanent observation blind on the refuge.



Linda Laack Laguna Atascosa National Wildlife Refuge, Rio Hondo, Texas

Linda Laack demonstrates the very essence of a Recovery Champion. She is interested in all endangered species but has had a real impact on and continues to work toward recovery of the ocelot. Linda has conducted research on the ecology of ocelots (*Leopardus pardalis*) in South Texas and carried out a longterm monitoring program in and around the Laguna Atascosa National Wildlife Refuge since the mid-1980s. A highlight of her research is that she took the only known photographs of ocelot kittens at den sites (located at the Laguna Atascosa NWR) in South Texas and thus verified the only documented breeding population in the United States.

In addition to conducting and overseeing her own research program and local recovery tasks, she has assisted numerous ocelot and wild cat researchers from the Service and universities on both sides of the international border. Linda has taken part in ocelot research efforts in Mexico and provided information for research efforts as far away as Panama. During her tenure at Laguna Atascosa NWR, Linda has coauthored several scientific papers dealing with aspects of ocelot management. Linda is considered one of the best and most knowledgeable native cat biologists in North America.



Linda Walker Jacksonville Field Office, Jacksonville, Florida

Throughout her 18-year career with the Service. Linda Walker has been closely involved with many major endangered species recovery efforts. For 15 years, Linda served as the senior recovery staff biologist for the Jacksonville Florida Field Office overseeing the recovery program for over 50 Florida species. During that time, she served as the National Team Leader for the EPA pesticide consultation evaluating the effects of 31 agricultural chemicals on listed species. She also serves as the Southeast region's point of contact for bald eagle (Haliaeetus *leucocephalus*) recovery issues and serves on the National Bald Eagle Recovery Team responsible for the pending delisting.

Linda is the Region 4 contact for whooping crane (*Grus americana*) recovery issues and is actively involved in the reintroduction of both the non-migratory flock of whooping cranes in Florida and the establishment of the eastern migratory flock. She is also involved in developing the new recovery guidance, the Recovery Initiative, and teaching two NCTC recoveryrelated courses. In her current role as Assistant Field Supervisor in the Jacksonville Field Office, Linda oversees the recovery programs for such controversial listed species as the Florida panther, whooping crane, Florida manatee, bald eagle (SE region), Florida scrub-jay, wood stork, and a host of others.



Lisa Arroyo New Jersey Field Office, Pleasantville, New Jersey

Lisa Arroyo has been instrumental in the recovery efforts for the federally listed bog turtle (Clemmys *muhlenbergii*) and swamp pink (Helonias bullata) throughout the state of New Jersey, which is a substantial part of the natural range for both of these threatened species. Illegal collection of bog turtles for the pet trade is a serious problem and impedes successful recovery efforts. Working with the state Division of Fish and Wildlife, Lisa helped to conduct a seminar designed to initiate a multi-faceted approach to bog turtle conservation involving public awareness, law enforcement, bog turtle population monitoring, bog turtle DNA collection, and site surveillance. Through personal credibility and collaborative leadership, Lisa has engaged many partners. She helped to secure numerous Cooperative Agreements with private landowners in 5 counties for habitat restoration or management of invasive plants on 21 bog turtle sites, which are all recognized as range-wide bog turtle conservation priority sites. Similarly, the New Jersey Field Office has entered into several voluntary agreements with private landowners to protect swamp pink under Lisa's direction. Since the majority of swamp pink populations are located on private land, these agreements provide a critical step toward the recovery of the species.



### **Loren Hays**

Carlsbad Fish and Wildlife Office, Carlsbad, California

Loren Hays has been working toward the recovery of the least Bell's vireo (Vireo pusilla bellii) for over 17 years. Among his many achievements, his most significant contributions have been his work in the Prado Basin and adjacent areas of the Santa Ana River in southern California. Loren has been working with numerous stakeholders to develop monitoring and management strategies for the 6000-plus acre site. Many of the strategies developed there are applicable to the vireo range-wide. Of particular concern has been the management of exotic species, including the trapping of brownheaded cowbirds (Molthrus ater), a non-native nest parasite that has severely impacted vireos and other open-cup nesters, and the management and removal of the giant reed (Arundo donax), an invasive non-native plant that has degraded countless acres of riparian habitat. Through Loren's guidance, leadership, and partnership with the Orange County Water District, Army Corps of Engineers, California Department of Transportation, California Department of Fish and Game, plus local landowners and resource conservation districts, the population of least Bell's vireos has risen from 19 pairs in 1986 to 440 pairs in 2002 in Prado. During that same time, the overall numbers of vireos have expanded from approximately 300 pairs to over 2000 pairs today.



Lorna A. Patrick Panama City Field Office (ES), Panama City, Florida

With Lorna Patrick's tireless efforts to motivate partnership action, many listed species of coastal northwest Florida are no longer in perilous unabated decline. For example, beach mouse habitat was so devastated by several hurricanes in 1995 that extinction was feared for one of the listed subspecies. Lorna coordinated field surveys involving biologists from the state, the Air Force, and the National Park Service, and these joint efforts have evolved into a partnership for habitat restoration, predator control, and population translocation under Lorna's leadership.

Lorna is also active in the recovery of listed sea turtles in northwest Florida. She has devoted many nights over the past ten years conducting sea turtle monitoring and spent weekends motivating scores of volunteers to take up the sea turtle conservation cause. She has worked with each of the coastal communities implementing a unique Partners for Fish and Wildlife project to retrofit lighting that is detrimental to sea turtles. Lorna is now working on stewardship partnerships with the electric companies so that the entire Florida panhandle will have sea turtle-friendly lighting by 2007. Lorna's efforts were the primary reason that two different state park managers nominated the Service for a Partnership Certificate of Appreciation from the Florida Department of Environmental Protection.



Marie Bruegmann Pacific Islands Ecosystems Office, Honolulu, Hawaii

Marie has worked for recovery of the more than 279 listed plants in Hawaii and other Pacific Islands in a variety of ways. Her highlights include a plant recovery strategy, a consultation that resulted in over a million dollars toward plant recovery, and her crowning jewel, the protection and restoration of the Alaka'i bogs.

Montane bogs are some of the most fragile ecosystems in the Hawaiian Islands. A bog survey on the island of Kauai was funded by the Service in 1994 and conducted by the National Tropical Botanical Garden. It identified nine bogs as high priority for protection against feral pigs and invasive alien plants. In 1996, the Service, the Hawaii Division of Forestry and Wildlife (DOFAW), and Wellington Fencing Company entered into a cooperative agreement to fence the nine bogs in the Alakai Wilderness Area of Kauai. In addition, the Service agreed to work with DOFAW and hunters to allow access to favored hunting areas, oversee the fencing company's progress, control alien plants, and monitor the recovery of the bog vegetation.

This project has been very successful. Since 1996, eight of the bogs have been fenced, two have been weeded, and monitoring has begun. The Service's willingness to work with the hunters has eliminated resistance from this community and has improved relations greatly.



Mark Clough New York Field Office, Cortland, New York

As a senior program biologist, Mark has provided, and continues to provide, unwavering leadership for the endangered species program, including recovery efforts at the New York Field Office. He has dedicated his professional career to recovery of the New York State populations of the piping plover (Charadrius melodus), Karner blue butterfly (Lycaedes melissa samuelis), dwarf wedge mussel (Alasmidonta heterodon), Chittenango ovate amber snail (Succinea chittenangoensis), northern wild monkshood (Aconitum noveboracense), sandplain gerardia (Agalinis acuta), American hart's-tongue fern (Asplenium scolopendrium var. americanum), Leedy's roseroot (Sedum integrifolium ssp. leedyi), seabeach amaranth (Amaranthus

*pumilus*), Houghton's goldenrod (Solidago houghtonii), bog turtle (Clemmys muhlenbergii), bald eagle (Haliaeetus leucocephalus), roseate tern (Sterna dougallii dougallii), and Indiana bat (Myotis sodalis). His historic knowledge about listing, consultation, and recovery is legend. Over the past 20 years, few endangered species issues in New York have escaped his attention. His record keeping has been extremely thorough and his list of contacts long. He was instrumental in providing support for our efforts to establish Region 5's first full-time recovery biologist position, in mentoring all of our endangered species biologists years before the Region established a mentoring program, and in helping set a course towards more recovery program activities.



Martin Kenney Carlsbad Fish and Wildlife Office, Carlsbad, California

Martin Kenney has been working towards the recovery of the least Bell's vireo (*Vireo pusilla bellii*) and the California least tern (*Sterna antillarum browni*) ever since he came to Southern California, or 19 of his 31 years with the Service. Most notably, he has worked closely with the International Boundary and Water Commission, Army Corps of Engineers, California State Parks, San Diego County, City of San Diego, and many other stakeholders to provide significant vireo habitat in the Tijuana River Valley in southwestern San Diego County. Today, there are over 100 pairs of vireos along the Tijuana River, a tremendous increase since 5 pairs in 1992.

Martin has also worked tirelessly with the Navy, Port of San Diego, Federal Aviation Administration, and other stakeholders to increase their awareness of the California least tern and how their actions may impact the species. Through his efforts, along with those of many others, the populations of least terns on Navy lands along the San Diego Bay have increased from 187 in 1993 to 927 in 2001. Along with Jack Fancher, Martin also secured a large portion of southern San Diego Bay to become part of the San Diego Bay National Wildlife Refuge, protecting important wildlife habitat.



### **Mary Parkin**

Northeast Regional Office (Region 5), Hadley, Massachusetts

Mary Parkin is a champion for all federally listed species in the Northeast Region. As Regional **Recovery Planning Coordinator** since 1989, Mary's tireless efforts have had a profound impact on the conservation of all of Region 5's species, from the Furbish's lousewort (Pedicularis furbishiae) in northern Maine to the Lee County Cave isopod (*Lirceus usdagalun*) in southwestern Virginia. Mary works closely with endangered species biologists in every field office in Region 5 in order to ensure that the recovery planning process is fully utilized to bring careful and critical thinking to bear on identification and articulation of the recovery needs of each species. Once plans have been formulated, Mary continues to monitor the status and efficacy of recovery efforts to make sure that priority recovery actions are identified and implemented across the Region.

Mary's contributions to the Service go far beyond regional boundaries. Mary helped design the Service's national recovery planning course, has been a primary instructor for that course since its inception, and is an active and dedicated participant in development of national recovery planning guidance. Her expert advice and counsel on matters of recovery planning are frequently sought by biologists in other regions of the Service, state agencies, nongovernmental organizations, and academia.



Michael Amaral New England Field Office, Concord, New Hampshire

Michael has dedicated nearly two decades of his Service career to the recovery of endangered species, including the peregrine falcon (Falco peregrinus anatum) in Alaska and New England. He has worked with numerous federal, state, and tribal entities to ensure that the falcons and their aeries were inventoried, monitored, and protected. In the East, that meant coordinating with an array of fish and wildlife agencies, conservation groups, private citizens, and the U.S. Forest Service. He actively sought funds for many projects related to the recovery effort and he personally has banded hundreds of young falcons as part of the effort to track them. Now that the species has recovered and is delisted, he serves as regional coordinator for the required postlisting monitoring effort that is underway.



Mike DeCapita East Lansing Field Office, East Lansing, Michigan

Mike has worked toward the recovery of the endangered Kirtland's warbler (Dendroica kirtlandii) for over 26 years. He was among the first to serve on the Kirtland's warbler recovery team, beginning in 1982, and has had uninterrupted participation to this day. Through the team, Mike has led a myriad of recovery efforts, culminating in an increase in population from 200 singing males in 1976 to over 1,000 singing males in 2001. This level of success would not have been possible without Mike's ability to facilitate a decades-long relationship between the Service, Michigan Department of Natural Resources, and U.S. Forest Service. This relationship has served as a nationwide example of interagency cooperation. Recently, the effort to recover this species, which migrates across international borders, expanded to include the Bahamian government. Mike initiated contact with Bahamian officials and secured the first recovery team meeting on wintering grounds in 2002. Mike has also been active in developing and implementing public outreach activities. The Kirtland's Warbler Festival and Jack Pine Auto Tours, for example, provide excellent

outreach tools and have successfully gained community support and involvement.



Nathan Allan Austin Field Office, Austin, Texas

Nathan Allan has been working in the Austin Field Office for 5 years on conservation efforts for west Texas aquatic species, particularly fish and invertebrates. He has built numerous working relationships and partnerships with local landowners, local governments, nongovernmental organizations, state agencies, and other federal agencies.

Through his work with the Texas Parks and Wildlife Department (TPWD) and local landowners, two new locations for the Pecos pupfish (Cyprinodon pecosensis) have been established on private lands, and Candidate Conservation Agreements have been signed with the landowners, helping to preclude the need to list this species. Nathan also cooperated with TPWD, local landowners, the Service's Partners for Fish and Wildlife Program and others to find a significant new location for the Devils River minnow (Dionda diaboli). His involvement in a major renovation effort at Diamond Y spring systems made it possible to restore the Leon Springs

pupfish (*Cyprinodon bovinus*) after its elimination there due to hybridization. Nathan has also been working with Big Bend National Park to improve conditions there for the Big Bend gambusia (*Gambusia* gaigei). Nathan has worked with researchers to fill information gaps for the species under his lead, and he aids captive breeding facilities to ensure there are back-up stocks of these species.



Pam Thiel La Crosse Fishery Resources Office, La Crosse, Wisconsin

Eight years ago, Pam Thiel reached beyond her office's traditional fishery role to help conserve the most endangered group of animals in the U.S., freshwater mussels. In the Upper Mississippi River, the zebra mussel invasion caused a breaking point for the survival of the federally endangered higgins eye pearlymussel (Lampsilis higginsii). So, in 1995, Pam organized a group of state and federal partners to collect native freshwater mussels from the Mississippi River and relocate the mussels into hatchery ponds. This project tested refugia as part of a mussel conservation strategy study. As mussel numbers continued to dwindle rapidly, Pam joined forces with the Genoa National Fish

Hatchery and many other partners in the spring of 2000 to develop artificial methods for reproduction and propagation. The release of artificially inoculated fish, the captive propagation of higgins eye, and an emergency relocation effort are saving or reintroducing these rare mussels in areas with low or no zebra mussels. To date, biologists have relocated hundreds of adult higgins eye out of harm's way, and have introduced thousands of juveniles into their native habitat. Because of Pam's initiative and partner efforts, significant progress has been made towards preventing extinction of this species.



Paul Hartfield Jackson Field Office, Jackson, Mississippi

Paul Hartfield is regarded as an expert on aquatic organisms and systems, and his assistance is frequently sought out by those within and outside the Service. Paul worked with others to bring attention to the extinction crisis of aquatic ecosystems in the Southeast, most notably to the extremely diverse Mobile River Basin of Alabama and Mississippi, which is habitat for approximately 200 endemic species. Paul was instrumental in the formulation of the Mobile River Basin Coalition, a group composed of representatives from state/federal government agencies, environmental organizations, landowners, and a number of businesses and industries, all committed to working together to promote good management of the Basin's streams and rivers. Paul worked with the Coalition to develop the Mobile River Basin Aquatic Ecosystem Recovery Plan, which supports community-based watershed stewardship planning and action for 22 listed species and complements recovery plans for another 17 listed species. Many Basin species are benefitting from Paul's research and initiative. For example, the range of the endangered snail, Tulotoma (Tulotoma magnifica), has been expanded to include several additional tributaries. The status of the Tulotoma is improving to the point that downlisting appears feasible in the near future, and delisting may even be attainable in the foreseeable future.



**Peter V. Campbell** Raleigh Ecological Services, Sandhills Office, Southern Pines, North Carolina

Since 1997, Pete Campbell has been the primary person responsible for the creation and development of a North Carolina Sandhills **Conservation Partnership involving** all the major conservation interests in the Sandhills area. The Partnership has a primary mission to recover the area's endangered redcockaded woodpecker (Picoides borealis) population and to protect and restore longleaf pine habitat, thereby protecting a number of declining and endangered species associated with this unique habitat. Pete has partnered with the Army at Fort Bragg, the North Carolina Wildlife Resources Commission, The Nature Conservancy, the Sandhills Ecological Institute, North Carolina State University, Jay Carter and Associates, a local consulting firm interested in RCW conservation, and with the North Carolina Department of Transportation. Pete is currently responsible for administering a Service Safe Harbor HCP Permit for red-cockaded woodpeckers in the sandhills region of North Carolina. Additional RCW habitat continues to increase in protection each year through the Safe Harbor program and other partnerships. For

example, Pete's assistance to Fort Bragg has resulted in an annual increase of 3-5 percent of the recovery population of RCWs. These achievements have resulted in the Army stating that they can adequately train and protect RCWs at Fort Bragg.



Ralph Costa Clemson Field Office, Clemson, South Carolina

Ralph Costa has served as the Southeast Region's red-cockaded woodpecker (Picoides borealis) recovery coordinator since 1991. In 1991, the Service had no partnerships with private landowners for RCW conservation and recovery. As of 2002, we have 139 private landowner partners, 347,439 acres of habitat and 509 groups of RCWs (50 percent of the known groups on private land) in partnerships with the Service through Safe Harbor Agreements, Habitat Conservation Plans, and Memorandums of Agreements. Many additional partners, acres and RCW groups are in the "pipeline." In pioneering private landowner partnerships, Ralph has written numerous landmark guidelines, strategies, and manuals for assisting Service partners with conservation of RCWs on their property. Ralph's

contributions extend beyond the RCW; he was a co-founder of the Safe Harbor Policy. He has also lead efforts to promote, design, and implement statewide RCW conservation plans (via Safe Harbor Agreements and/or HCPs), in cooperation with state wildlife agencies. No such plans were in existence in 1991; today, we have statewide (range of the species) plans in Virginia, South Carolina, Georgia, and Texas, a regional plan (Sandhills) in North Carolina, and final draft statewide plans completed for Florida, North Carolina, Louisiana, and Alabama.



Richard (Rich) King Necedah National Wildlife Refuge, Necedah, Wisconsin

Rich King is a wildlife biologist at Necedah National Wildlife Refuge in Wisconsin. He has contributed greatly to the recovery of the Karner blue butterfly (*Lycaedes melissa samuelis*) since 1992, when he began annual surveys of the insect on the refuge. He oversees 12 restored Karner blue population complexes at Necedah. Rich has pioneered techniques for monitoring Karner blue populations and managing habitat to benefit the insect. He has overseen research at the refuge focusing on habitat management and Karner blue dispersal, which has assisted in determining management strategies for the butterfly. Rich is considered a regional expert on Karner blue population dynamics and serves as a consultant to the Karner blue recovery team.

Rich is self-motivated and adept at handling many projects at once. He has taken the initiative to bolster recovery efforts for the Massasauga rattlesnake, whooping crane, and timber wolf, as well as the Karner blue butterfly. In his work with the Karner blue, he has coordinated with numerous partners, including the Wisconsin Department of Natural Resources, University of Wisconsin at Stevens Point, Indiana Dunes National Lakeshore, and Ohio State University.



**Robert (Bob) Currie** Asheville Field Office, Asheville, North Carolina

Bob Currie has championed the protection and recovery of bats and cave/karst systems nationwide for over 20 years. Bob has been especially active in the protection and recovery of the Indiana, gray, and Virginia big-eared bats (*Myotis* sodalis, *Myotis* grisescens, and *Corynorhinus* townsendii *virginianus*). Recognizing early that human disturbance was a major cause of population declines of many cave-dwelling bats, Bob has worked with a variety of external partners to design and construct dozens of gates and fences that restrict human access to caves and mines while allowing bats to pass. Particularly noteworthy are Bob's partnerships with professional and amateur cavers in the speleological community, The Nature Conservancy, Bat Conservation International, American Cave Conservation Association, and state wildlife conservation agencies. Using primarily volunteer labor and stretching very limited Service funding to the maximum, Bob has acquired the necessary materials and organized dozens of gate and fence construction projects, usually on weekends when the volunteers were available.

Bob has worked tirelessly to educate the public about the importance and plight of our imperiled bats, speaking and publishing frequently. In recognition of his leadership and many accomplishments, Bob received the Distinguished Service Award from Bat Conservation International in 1995.



#### **Ron Refsnider**

Great Lakes & Big Rivers Regional Office (Region 3), Fort Snelling, Minnesota

Ron Refsnider has worked 19 of his 24 years with the Service in **Region 3's Endangered Species** Program. He has been involved in gray wolf (Canis lupus) recovery, reclassification, and delisting efforts for over 10 years. Ron coordinated the national proposed and draft final rules to reclassify the gray wolf to threatened status in the lower 48 states, resulting in a final rule that reflects the ideas from over 40,000 individuals/groups, 11 peer reviewers, and 14 public hearings across the 48 states. The extent of coordination and review with Service personnel and the Solicitors from across the country was extraordinary. Wolf recovery is often an emotional issue, but Ron always remained focused on the biological information and ESA processwhether during internal Service meetings or at public hearings. In December 2000, Ron received the Department of the Interior's STAR Award and a personal letter from former Service Director Jamie Clark, who thanked him for his tireless efforts in coordinating the proposed rule, which was one of the

largest in scope and most complex developed for a species protected under the ESA.



Sarah Dawsey Cape Romain National Wildlife Refuge, Awendaw, South Carolina

Cape Island is the largest nesting area for the loggerhead sea turtle (*Caretta caretta*) north of Cape Canaveral, Florida, with an average of 1000 nests annually. It receives approximately 30 percent of the nesting effort in South Carolina. Although the nesting populations of Florida's loggerhead sea turtles are increasing and doing well, the northern subspecies is continuing to decline.

For the past 11 years, Sarah Dawsey has been the primary project coordinator of the Cape Island Nest **Relocation Project.** Even before turtles arrive at the refuge, Sarah spends countless hours preparing for the upcoming nesting season. She is responsible for hiring and training a seasonal crew of four biological technicians. In addition, she trains and educates at least 15-20 volunteers per season. Beginning in August when the main hatchery nests begin to hatch, for 2 weeks Sarah and her crew spend long nights and days on Cape Island.

They ensure that all hatchlings from this one non-self releasing hatchery make it safely to the ocean. As a result, over the past 11 years, Sarah and her crews have protected more than 21,000 nests, successfully hatching more than 1,122,400 loggerhead turtle hatchlings!



**Stewart Reid** Klamath Falls Fish and Wildlife Office, Klamath Falls, Oregon

Stewart Reid is responsible for recovering the endangered Modoc sucker (Catostomus microps), a beautiful little fish of the harsh Modoc Plateau in northeastern California and southern Oregon. By searching through old museum specimens and by tireless fieldwork, Stewart almost doubled the species' known range. To evaluate the role of hybridization, which was considered a major threat to Modoc suckers, Stewart spearheaded a genetic and morphological study involving researchers from four universities. He acted as an advisor to a number of graduate students with projects relating to Modoc suckers. This work is providing crucial insight.

At the time of its listing, the Modoc sucker was also threatened with habitat degradation. Many of the streams occupied by Modoc suckers

are on private land, and Stewart has dedicated much of his time to establishing cooperative relationships with local ranchers and landowners. He provided technical assistance and sought funding for riparian restoration projects and is always looking for ways to make species recovery compatible with ranching. He is also an active participant in community-based watershed groups and local education centers. At the same time, Stewart is busy laying the groundwork for passing the torch on to the local community, the future stewards of the Modoc sucker.



**Stuart Leon** Southwest Regional Office (Region 2), Albuquerque, New Mexico

Stuart Leon is a recovery champion in the Southwest, demonstrating excellent leadership in working with diverse groups and over 300 stakeholder representatives on the southwestern willow flycatcher's (*Empidonax traillii extimus*) recovery plan. This outstanding recovery effort was a collaborative, public process, involving cooperation across 7 states, 3 Service Regions, multiple tribes, ranchers, public water resource management agencies, and numerous other stakeholders. Due to Stuart's inclusive leadership style and growing trust, we will see the first ever tribal subcommittee input to a multi-state recovery plan. The recovery plan is a culmination of 4 years of immense effort, cooperation, and communication with ranchers and private landowners and public water resource management agencies from California to New Mexico and Texas. The recovery plan will include measurable results that can be understood by the public, stakeholders, and partners. This plan includes significant scientific and research breakthroughs on the southwestern willow flycatcher, riparian habitat in the southwest, exotic riparian plant species control, and collaborative water management and conservation for southwestern streams and rivers in the 7-state area. The resulting product will serve as a national role model for endangered species recovery planning across a multi-state landscape with diverse stakeholders and partners.



Susi von Oettingen New England Field Office, Concord, New Hampshire

Since 1992, Susi has spearheaded surveys for the dwarf wedge mussel (Alasmidonta heterodon) throughout New England, leading to the discovery of the largest population anywhere in its range as well as an array of smaller populations. The surveys have stimulated interest in freshwater mussel conservation. Since the surveys began, two state mussel atlases have been published and two more are nearing completion. Through meetings, outreach programs, and publications, Susi and her state counterparts have ensured that mussel conservation is included in workshops for watershed associations, land conservation programs, and (in New Hampshire) cooperative extension courses for foresters. The surveys also stimulated new mussel research at state colleges and high schools.

In cooperation with biologists from New York and Vermont, Susi also coordinated the first efforts to follow Indiana bats (Myotis sodalis) from their hibernacula to their summer habitats through the use of radio telemetry. As a result, she and her counterparts documented the first summer roost sites of Indiana bats in New York and Vermont. All but one of the 30 summer roost sites are located on private land. However, Susi was able to secure permission to survey sites and locate roost trees at all but two locations. She and her state and Forest Service counterparts also established a New York/New England Bat Work Group.



### **Ted Swem**

Fairbanks Fish and Wildlife Office, Fairbanks, Alaska

Ted Swem's efforts have made his name synonymous with the recovery of the Arctic and American peregrine falcons (Falco peregrinus tundrius and Falco peregrinus anatum). Since 1981, Ted has conducted annual summer surveys of the Arctic peregrine falcons nesting along the remote cliffs of the Colville River in northern Alaska. The data that Ted collected contributed significantly to the decision to delist the Arctic peregrine falcon in 1994. In addition, Ted documented a decline in pesticide concentrations and identified mercury as a potential contaminant of concern. None of these findings would have been possible without Ted's unique longterm dataset. Throughout the recovery and delisting process, Ted has coordinated with all other Service Regions, numerous states, other federal agencies, and numerous foreign governments, covering issues ranging from take for falconry to developing and implementing a post-delisting monitoring plan. Ted played a similar role representing Region 7 during the recovery and delisting process for the American peregrine falcon. Equally important as what

Ted has accomplished is the manner in which he has done so. Ted's record of conducting surveys in a safe manner for himself and those who have assisted him is exemplary, despite the fact that much of the work involves climbing cliffs in remote and often inhospitable areas. representing federal, tribal, state, and local governments as well as from private industry and citizens. Tim has been instrumental in getting these various stakeholders to support the recovery plan as it has developed.



**Tim Cummings** Columbia River Fisheries Program Office, Vancouver, Washington

Tim, as a member of the bull trout recovery team, began work on development of the recovery plan for the bull trout (Salvelinus confluentus) shortly after this fish was listed as threatened, and he will be a critical player in the implementation of the plan once it is adopted. Along with other Service biologists, Tim played a important role in the development of the overall recovery framework for the **Columbia River Distinct Population** Segment. In addition, Tim was involved with plan development in 12 recovery units, and was lead author on four recovery unit chapters in Washington. Tim also served as the recovery plan's liaison to Native American tribes and actively worked with Columbia River tribes. His participation in the recovery unit process required close coordination and interaction with individuals



**Tom Augspurger** Raleigh Field Office, Raleigh, North Carolina

Tom has used his interpersonal skills to establish a solid working relationship with North Carolina and regional EPA staff to address water quality issues affecting federally listed species. This partnership has resulted in positive work on water quality issues that aids a number of listed aquatic species.

As the Service's Environmental Contaminants Biologist for North Carolina, Tom has been instrumental in helping to improve state water quality standards for threatened and endangered aquatic species, including the endangered Cape Fear shiner (*Notropis mekistocholas*). Additionally, Tom's efforts were principal in establishing captive propagation facilities for the Cape Fear shiner and facilities for captive propagation of native mussels. Artificial propagation is, in turn, allowing new opportunities for toxicity testing, public education, and a potential for future repatriation.



**Tom Stehn** Aransas National Wildlife Refuge, Austwell, Texas

Tom is the Service's national whooping crane coordinator and co-chair of the bi-national whooping crane (Grus americana) recovery team. Working at Aransas National Wildlife Refuge in Texas, he has been involved in recovery efforts for this endangered bird for the last 15 years. Tom oversees management of the Aransas wintering habitats and helped implement a prescribed fire program to create better foraging habitats for the cranes in the refuge uplands. He works closely with his Canadian counterpart, Brian Johns of the Canadian Wildlife Service, on monitoring the wild flock as well as coordinating captive breeding programs at several facilities.

The recovery team has an overall goal of having at least three populations of whooping cranes in the wild. The one natural flock migrates between Aransas NWR and Wood Buffalo National Park in Canada. An experimental nonmigratory population is being established in Florida, and there are new efforts to establish another migratory flock between Wisconsin and Florida. Tom has been instrumental in creating both of the new flocks. The recovery team had to gain the cooperation and acceptance of several state fish and game agencies as well as many federal, state, and local entities.



Will McDearman Jackson Field Office, Jackson, Mississippi

Will has worked for the last seven years in a variety of roles and programs, including as an environmental negotiator, consensus builder, scientist, and regulator to identify and initiate conservation opportunities through sections 7 and 10 of the ESA. For example, Will has used Habitat Conservation Plans for breakthrough developments benefitting the Red Hills salamander (Phaeognathus hubrichti) and redcockaded woodpeckers (Picoides *borealis*). Will negotiated HCPs with the major timber industries that protect all habitat required for recovery of the salamander, about one-third of the total range-wide habitat for the species. For the woodpecker, Will was the lead biologist in developing the first mitigation standards providing no

net loss of breeding groups, while allowing the landowner to harvest the desired timber. He has since developed a number of key HCPs that replace destructive conflict with a private landowner program that conserves RCWs while responding to landowner concerns. In the section 7 arena, Will's scientific response and challenge to the Army Corps of Engineers' assessment of the effects of flood control in the Yazoo Basin has resulted in a 5-year, \$5 million study on the endangered pondberry (Lindera melissifolia), representing perhaps the largest single investigation funded for a listed plant in the southeast.



William (Bill) A. Tolin West Virginia Field Office, Elkins, West Virginia

William (Bill) Tolin has truly benefitted numerous listed species over a distinguished career. In the early 1980s, Bill gathered natural history information on birds, mammals, fish, mussels, and plants on 38 islands in the Ohio River, resulting in the establishment of the Ohio River Island National Wildlife Refuge. This refuge is a recovery area for three federally listed species: the bald eagle (*Haliaeetus leucocephalus*), the fanshell mussel (*Cyprogenia stegaria*), and the pink mucket pearlyshell (*Lampsilis abrupta*).

Since the mid-1990s, Bill has also been heavily involved in the protection of endangered bats. Construction of angle iron gates at six large caves in West Virginia and one cave in the Daniel Boone National Forest in Kentucky has resulted in steadily increasing wintering bat populations in these caves. Bill has also worked closely with the Monongahela National Forest for 16 years regarding the protection of federally listed species in the forest. Over the last four years, Bill helped the Forest to develop a Forest Plan amendment to protect nine federally listed species. Implementation of new standards and guidelines developed by Bill to protect the endangered Virginia northern flying squirrel (Glaucomys sabrinus fuscus) may lead to delisting this species in the near future.

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