# The Endangered Red Wolf - Program Report – Winter, 2008

#### **Red Wolf Wild Population**

The Red Wolf Recovery Program of the U.S. Fish and Wildlife Service, located in northeastern North Carolina, manages the world's only wild red wolf (*Canis rufus*) population. Fiscal Year 2007 represents the 20th consecutive year of successful management. By spring 2007, the wild population had produced over 400 wild pups, with 31 pups born in the wild in 2007. The wild population of red wolves is currently composed of more than 100 wolves comprising nearly 18-22 packs distributed across 1.7 million acres in five North Carolina counties: Dare, Tyrrell, Hyde, Beaufort and Washington. Population monitoring is done in a number of ways: trapping, scat sampling and tracking using ground and aerial telemetry.

### Red Wolf Adaptive Management Plan

The Red Wolf Adaptive Management Plan began in 1999 and is implemented by the Red Wolf Recovery Program field team headquartered at Alligator River NWR. An independent panel of scientists, known as the Red Wolf Recovery Implementation Team, meets twice per year to review pertinent field data, discuss red wolf and coyote management and population dynamics, and make recommendations to the Service regarding adaptive management and red wolf restoration. Reviews by the Recovery Implementation Team show the Plan is effective in restoring the wild red wolf population and managing competitors (eastern coyotes). Since 1999, the number of red wolf breeding pairs (packs or family groups) and red wolf litters trends upward while the number of breeding coyotes or hybrid litters trends downward. The Adaptive Management Plan utilizes a 3-zone approach over the 5-county restoration area: Overall, the Red Wolf Adaptive Management Plan shows good progress in restoring red wolves and managing coyotes.

## Red Wolf Captive Breeding Program

As part of the Red Wolf Recovery Program, the Red Wolf Captive Breeding Program is effectively implemented by 40 captive facilities across the United States. The effort is overseen by the Red Wolf Recovery Program Team Leader, Bud Fazio, located at the Alligator River National Wildlife Refuge, and is coordinated daily by the Red Wolf Species Survival Plan Coordinator, Will Waddell, at the Point Defiance Zoo and Aquarium in Tacoma, Washington. As of December, 2007, the current total number of wolves in the captive population is 203 (this number changes frequently). Red wolves are held in captivity for a number of reasons including cooperative breeding, reproduction research, and conservation genetics work. The breeding program maintains genetic diversity among red wolves and prepares a small number of red wolves for possible release into the wild.

The Red Wolf Recovery Program was nominated for, and won, the Association of Zoos and Aquariums Award for 2007. This is a prestigious national award and a tribute to long-term conservation efforts in red wolf restoration. Will Waddell accepted the award for the Red Wolf Recovery Program.

#### **Red Wolf Island Programs**

The Red Wolf Recovery Program and Red Wolf Captive Breeding Program partner with two U.S. Fish and Wildlife Service National Wildlife Refuges to raise red wolves in wild settings on islands. Young wolves growing up on these islands learn survival skills that prepare them for release into the wild red wolf population in northeastern North Carolina. The St. Vincent National Wildlife Refuge in Florida maintains a pair of red wolves for breeding in the wild. The pair did have pups in 2007. Bulls Island is part of the Cape Romain National Wildlife Refuge in South Carolina and currently has no red wolves on site. There is a breeding pair and pups on Cape Romain's mainland property at the Sewee Visitor Center. The Cape Romain Refuge educates approximately 200,000 people per year about red wolves. These island programs play vital roles in the red wolf captive breeding program via education and producing wildborn red wolf pups for release.

#### Red Wolf Landowner Agreements

The Red Wolf Recovery Program is partner to conservation and access agreements with two different owners of private land comprising 15,445 acres. These tracts of land are strategically selected to maximize monitoring of red wolves and other canids in the northeastern North Carolina five county experimental population area.

### Red Wolf Genetic ID Project (including M.S. & PhD)

The Red Wolf Recovery Program is working with wildlife genetics researchers to identify gene loci in red wolves and coyotes. This information provides red wolf biologists with data to distinguish and manage red wolves and other canids such as coyotes in the recovery area. Genetic analysis provides invaluable statistics on which to base sound management decisions that will ensure the success of the red wolf reintroduction effort and the long-term survival of the species. Both Master's degree and PhD work at the University of Idaho have identified 18 gene loci in red wolves to date, making it easier to distinguish between red wolves and eastern coyotes.

## Modeling the Wild Red Wolf Population

The Red Wolf Recovery Program is partnering with researchers from Trent University in Canada who are modeling survival and demographics of the North Carolina wild red wolf population. The population demographic model shows that the wild red wolf population will survive successfully with assistance from biologists in managing problem coyotes.

#### Red Wolf Captive Research Facility at North Carolina State University

In a joint effort between North Carolina State University and the Red Wolf Recovery Program, important research on captive red wolves is conducted annually. Research is being conducted on such topics as disease detection, physiological processes, food habits and behavior characteristics. Ultimately, information learned at the North Carolina facility will be very helpful in both the captive breeding effort and wild population management effort of the Red Wolf Recovery Program. Veterinary school faculty member Dr. Michael Stoskopf is also lead facilitator of the Red Wolf Recovery Implementation Team.

### **Howling Safaris 2007**

Approximately 1,100 participants 19 Programs (1 was cancelled due to weather)

Red wolf howlings have proven to be very popular programs on the Refuge. Because of overwhelming demand for howlings, a reservation system was instituted in 2003. The program continued to be free of charge during 2006. The Red Wolf Coalition is responsible for registrations and limits the capacity to 100 people per safari, however, the volume could easily have exceeded that number. Because of increasing registration requests, a \$5.00 administration fee was instituted in 2007. This nominal charge did not affect the number of participants.

## **Red Wolf Program Presentations**

The Red Wolf Recovery Program is contacted by a number of organizations, clubs and schools annually to give Red wolf presentations. During 2007, these presentations reached over 16,000 people through off-site programs. The eight-member red wolf staff participates in red wolf outreach and education as their schedules permit.

The "Far Traveler" teacher curriculum celebrated its 10th year in circulation and, with the original author's assistance, was revised in 2007. Teacher workshops will continue for 2008 beginning with an early seminar. Educators can select "Far Traveler" workshops to fulfill one of the requirements for North Carolina Environmental Education Certification. Also, as part of red wolf educational outreach, Discovery Boxes are circulated among educators. A Discovery Box contains red wolf teaching tools such as a red wolf pelt, collar, track cast, "Recovering a Species" video, howling cassette and informational materials. New to the Discovery Boxes for 2007are two library books (one donated and the other was funded via a partnership effort) and a small photograph album. The howling cassette was transferred to a cd format and the VHS "Recovering a Species" was converted to dvd. Discovery Boxes traveled to 16 different educational facilities in 2007, reaching approximately 1,500 students and adults.

### 2007 Red Wolf Recovery Program Staff

Throughout the year, volunteer caretakers maintain the Sandy Ridge facility under the supervision of Chris Lucash, red wolf biologist. Caretaker duties include feeding wolves temporarily located in the

pens, ground maintenance, assistance with red wolf howling safaris, supporting the work of red wolf wildlife biologists, and other duties as assigned. There were 3 caretakers at Sandy Ridge during the 2007 calendar year.

#### **Red Wolf Coalition**

The Red Wolf Recovery Program continues to work closely with the Red Wolf Coalition (RWC), a citizen-support organization whose mission is to educate and promote community awareness for the red wolf. Its Board of Directors consists of 12 members from various locations in North Carolina, Virginia, California, Ohio and Washington DC. This non-profit organization co-sponsors howling safaris with the Service and participates in outreach events throughout the year. Kim Wheeler has been the Executive Director, with an office in Columbia, for 3 years. For 2007, RWC, in partnership with the USFWS and donors, a canid exhibit was brought to the Pocosin Lakes National Wildlife Refuge in Columbia, NC, at a cost of nearly \$10,000. The exhibit was viewed by hundreds of visitors (including students) from May – October, 2007.

The International Wolf Center dedicated its Winter, 2007, edition of "International Wolf" entirely to red wolf content. The 30-page magazine has a readership of approximately 10,000.

The first International Wolf Center Red Wolf Country Discovery Trip was hosted by the RWC. Red Wolf Recovery Program staff participated in program offerings. 16 people attended and the trip was so popular that another one is scheduled for 2008.

### **Outreach Products**

Working with the Timber Wolf Alliance and various artists, a red wolf image was chosen for the 2007 "Wolf Awareness Week" poster. The image created by Elise Hammond will eventually be offered as a sign-and-numbered print for public purchase through the Red Wolf Coalition.

A gray fox pelt and another eastern coyote pelt were added to outreach educational materials.

The "Red Wolf Journal" replaced the "Red Wolf News" and was published twice in 2007.

A brochure was created and sent to all libraries and middle schools in the 5-county restoration area, offering red wolf educational programs from the Red Wolf Recovery Program and Red Wolf Coalition. Several schools have already asked for a speaker.

Twenty Species Survival Plan educators from red wolf captive facilities across the U.S. traveled to Manteo, NC, and participated in a red wolf educators workshop.

## Red Wolf Education and Health Care Facility

The facility contractor completed the building in February, 2007, and keys were exchanged for the Red Wolf Education and Health Care Facility, located in Columbia, NC, on the PLNWR. The facility will

provide red wolf processing space for wildlife biologists as well as provide space for public education programs. Eventually, red wolf enclosures are planned behind the building site. When staff is available, education programs will take place at the facility as well as providing tours for visitors by appointment.

### **Photo Album:**

# **Red wolf tracking collars:**





This particular collar belongs to an "adopted wolf;" a program sponsored by the Red Wolf Coalition.



ALLIGATOR RIVER NATIONAL WILDLIFE
REFUGE OFFICE, Manteo, NC
The Red Wolf Recovery Program is on the second floor.



GETTING READY TO FLY Red Wolf Recovery Program wildlife biologists fly twice a week to conduct aerial telemetry.



^ Red wolf tracks

< Joey Hinton photo >



During Joey's graduate study field work, he observed this red wolf in an agricultural area.

2006 Den and pup photos taken by Chris Lucash, Red Wolf Wildlife Biologist:





