

Q & A's on Red Wolf Recovery **Version 4/4/2022**

Red Wolf Biology

Q: Are red wolves a danger to humans? Do they adversely affect deer population? These are the two concerns I heard from the public.

A: There has never been a documented incidence of a red wolf attacking a human. Regarding the impacts of red wolves on game populations, based on North Carolina Wildlife Resources Commission (NC WRC) data, declines in white-tailed deer numbers within the North Carolina Nonessential Experimental Population (NC NEP) somewhat mirror those found in eastern North Carolina outside of the NC NEP area. In addition, white-tailed deer harvest numbers have declined in this area over a period when red wolf numbers have also substantially decreased. There are many factors affecting the population size of white-tailed deer within the NC NEP (e.g., hunter harvest, habitat loss, predation, disease) with red wolf predation being a lower additive impact rather than a major influence, particularly under the current low population numbers of red wolves.

Although red wolves routinely prey on white-tailed deer as part of their diet, there has been no direct evidence that red wolf predation is a significant cause of decline in white-tailed deer numbers on a population level. White-tailed deer continue to persist in areas that have been occupied by red wolves since reintroduction 35 years ago. On Alligator River National Wildlife Refuge (NWR) itself, white-tailed deer numbers appear to be remaining relatively constant (USFWS 2008). As reported in the Alligator River NWR Comprehensive Conservation Plan (CCP) in 2008, white-tailed deer herd checks on the refuge show the population was at or slightly above carrying capacity for pocosin habitat. It is worth noting that the population of white-tailed deer reached carrying capacity during a time period when the red wolf population within the NC NEP was near its highest levels, particularly on the refuge.

Red Wolf Management in the North Carolina Nonessential Experimental Population

Q: What measures will be taken to ensure the safety of the released individuals in regards to human activity?

A: All released red wolves will be fitted with bright orange collars to help distinguish them from coyotes in order to reduce the likelihood of gunshot mortality from misidentification. Further, the Service recently collaborated with the North Carolina Wildlife Federation (NCWF) to purchase mobile electronic highway message boards to use along roadways to alert drivers where red wolves are known to be active.

The radio collars used on all red wolves to be released into the NC NEP have also been modified to include strategically placed orange reflective material that will increase visibility of the animal along roadways at night, particularly when they are moving, and provide additional identification for hunters to decrease gunshot mortality due to misidentification.

We hope these signs, along with beginning to use highly reflective material on radio collars of red wolves, will increase driver awareness of red wolves to reduce road mortalities. Additional research and methods for potentially reducing vehicle strike mortalities even further are currently being discussed with a wide variety of partners, organizations and researchers.

Additionally, newly released red wolves are monitored as closely as possible and if/when they come in close proximity to major roads or other areas that could pose a danger to them, Service personnel work to push them out of that area by hazing or scaring them.

Q: Will there be potential for pup foster this upcoming season?

A: The Service will assess opportunities to pup foster in Spring 2022 and may pursue those opportunities when conditions are suitable. Determinations on whether conditions are suitable are based on a variety of factors including, but not limited to, the presence of a wild litter within the NC NEP, the availability of captive-born pups with an age similar to a wild litter, and access to the wild den.

While pup fostering has been shown to be a highly successful method of reintroduction, the current circumstances on the landscape significantly limit the opportunity for the use of this preferred technique (e.g., no proven red wolf breeding pairs within the NC NEP). When conducting pup fostering, the preferred method is to add one or more pups into the litter of an experienced red wolf breeding pair with proven parental skills. However, in the absence of that option, pup fostering could potentially be conducted with a pair having their first litter or with a mixed canid pair provided favorable circumstances exist.

Q: Will FWS remove red wolves that enter a farm or other property if requested by the landowners?

A: The Service can only do so under limited circumstances. In 2018, the Federal Court in the eastern district of NC permanently enjoined the Service from taking red wolves either directly or by landowner authorization, without first demonstrating that such red wolves are a threat to human safety or the safety of livestock or pets.

Red wolves can be captured and translocated from private lands for management purposes to assist with the formation of new breeding pairs for the benefit of the genetic integrity of the wild red wolf population within the NC NEP (§17.84(c)(5)(iv)). Additionally, the Service's Red Wolf Team is available to work with any private landowner to address any concerns or issues related to the presence of red wolves on their private lands to the full extent allowable.

Q: How many wolves will be released to Pungo?

A: There are currently no red wolves scheduled to be released in the Pungo area as part of the Phase II Release Plan. However, a family group of 5 red wolves (2 adults, 2 yearlings and a pup born in April 2021) will be released further east on Pocosin Lakes NWR. It is possible that all or

some of them could potentially use the Pungo area at some point. In addition, there may be an opportunity to foster pups in the Pungo area in Spring 2022.

Q: Why are these wolves being mandated by court order to be released? Are there a lot of hunters in these counties?

A: On November 16, 2020, Plaintiffs filed a complaint against the Service alleging violations of the Endangered Species Act (ESA) and the Administrative Procedures Act (APA) in connection with management of the NC NEP. Specifically, they alleged that the Service interpreted its existing 10(j) regulations as prohibiting additional releases of captive red wolves into the NC NEP and prohibiting implementation of the Red Wolf Adaptive Management Work Plan. They stated that this interpretation constituted a new policy that was adopted in contravention of the ESA and the APA. Shortly after filing the suit, Plaintiffs filed a motion for preliminary injunction to require the Service to release red wolves from captivity.

On January 22, 2021, the Court granted Plaintiffs' motion for preliminary injunction, determining that Plaintiffs were likely to succeed on the merits of their claims that the Service adopted a policy preventing them from releasing captive red wolves into the NC NEP in violation of the ESA and the APA. The Court's injunction barred the Service from effecting this policy and ordered the Service to develop a plan to release red wolves into the NC NEP.

Hunting for various game animals is a legal activity that is widely enjoyed within these counties.

Q: Vehicle collisions are the second highest cause of red wolf deaths. Any plans to pursue new crossing \$\$ from the infrastructure bill?

A: Vehicle strike mortalities are the second leading cause of mortality over the course of the 35 years since reintroduction of red wolves into the NC NEP. However, vehicle strikes were the highest cause of mortality in 2021 with 5 of the 7 known red wolf mortalities in the wild occurring as a result of a vehicle strike. Discussions are ongoing with multiple partners, including federal and state agencies, organizations, and researchers, on the best short- and long-term options for potentially reducing vehicle strike mortalities of red wolves. Discussions include exploring the potential for receiving funds through the recent infrastructure bill for things such as wildlife crossings.

Q: What is your target number for population size in the wild in the next 10 years?

A: We currently do not have a specific population target for the eastern NC red wolf population. As part of the process of updating the Red Wolf Recovery Plan, we are working with the Red Wolf Recovery Team to conduct an updated population viability analysis (PVA) which will help inform this question.

Q: What is being done differently with this program that makes it seem more viable than the last program?

A: The Service is revitalizing its commitment to red wolf conservation in the NC NEP. We are looking at past successes and challenges and we intend to continue proven wildlife management techniques that have demonstrated success, while implementing innovative approaches to address existing threats to red wolves and enhance the probability of successful translocations. We recognize that we cannot recover the red wolf alone and are increasing our focus on collaboration and community and partner engagement to recover this species. As part of this revitalization, we are working to provide support to landowners and stakeholders by increasing engagement, communication, and transparency in all our actions.

Q: Do you have any current active plans to release captive-raised Red Wolves into the Wild in 2022 or 2023. If so where and how many?

Q: What are the total number of red wolves the Service is planning to reintroduce to the recovery area during 2022 and 2023?

A: The FWS is currently working to implement the court-ordered release of ten red wolves. Any further releases would be dependent on suitable conditions being present and would be communicated to the public and affected landowners in advance. We need the support of all stakeholders to promote the successful outcome of the releases and the continued efforts of red wolf recovery.

Q: Are there plans for increasing red wolf genetic diversity in the eastern NC population with alleles imported from the gulf coast canids? If so, will it be done through selective cross breeding? Artificial insemination? In vivo fertilization followed by implant? Some combination of techniques?

A: Currently, there are no plans for using Gulf Coast canids to increase red wolf genetic diversity in the NC NEP.

Q: You have 8 wolves for 35 years of work and 514 landowners who've kicked you off their property. What will be different this time?

A: The red wolf population in eastern NC grew from the initial release of 12 animals in 1987 to a peak population of over 120 red wolves by 2012. The recovery of red wolves achieved a great deal of success and served as a model for other successful reintroductions of endangered predators. The eastern NC red wolf population began to decline after 2012 in the face of rising human-related mortality. Our success going forward will depend on expanded efforts to work with landowners and other partners, particularly the NC WRC, to find ways to reduce human-related mortality.

Recognizing this reality, we are working with partners to increase outreach and education efforts. We have also implemented our Prey for the Pack program to provide landowners with resources (e.g., funding) and planning assistance to improve wildlife habitat on their lands that meets their land management goals while allowing for the presence of red wolves. These and other efforts to engage landowners and other stakeholders to promote sustainable human-red wolf coexistence will be key to successful red wolf recovery. We have also implemented steps such as adding reflective material to the orange collars on all known wild adult red wolves. We are hoping this

will increase visibility and reduce cases of gun-shot mortality from mistaken identify with coyotes and also reduce vehicle strike mortality.

We believe it is inaccurate to state that 514 landowners kicked us off their property. In fact, many landowners support recovery efforts. However, we are seeking to partner with all affected landowners regardless of their past or current attitudes towards red wolves. We hope that increased transparency and collaboration will improve our relationships with all landowners going forward.

Q: As you change gears and plot new plans for recovery and conservation, please stop referring to NC's red wolves as non-essential. The wolves are the opposite of non-essential. They are the last wild population of their kind. Some might say that makes them critically essential.

A: The term "nonessential" is a legal designation of experimental populations under section 10(j) of the ESA. Under section 10(j), the FWS may designate a population of a listed species as experimental if it will be released into suitable natural habitat outside the species' current range. An experimental population may be considered "essential" or "nonessential." An "essential" population is one that is considered essential to the continued existence of an endangered or threatened species. In 1986, the population of red wolves in eastern North Carolina was designated as a nonessential experimental population (NEP) because it was fully protected in captivity. Since then, that population has been referred to by its legal designation, the NC NEP. The use of the term "nonessential" should not be misconstrued as indicating a lack of value of the North Carolina population of red wolves.

Q: Going from 120 individuals to less than 20 in a decade is a huge change. What was the biggest reason things went from an increasing population to a decreasing one? Did management efforts drastically decrease? This is the only thing I felt wasn't explained on the zoom call.

A: The rapid decline in the red wolf population may be largely attributable to human-caused mortality, such as gunshot and vehicle mortality. Gunshot mortality stemmed from coyote presence on private land and associated unintentional killing of red wolves as people increased efforts to eradicate coyotes. Additionally, there was backlash towards red wolves and the Service's efforts from a court injunction on coyote hunting at night and without a permit within the NC NEP, which some private landowners felt infringed on the private property rights and led to loss of access to conduct management on key pieces of private property. Hybridization with coyotes, which is exacerbated by human-caused mortality (particularly breeding pairs), limitations of the ability to manage hybridization, and low red wolf numbers also played a key role in this decline. Limited releases, pup fostering and translocations from St. Vincent NWR may have also played a role. The Service suspended these activities while independent reviews of the red wolf recovery program were ongoing by the Wildlife Management Institute and others. At that time, the Service was concerned that we lacked explicit authority to release additional red wolves. The Service was, and still is, concerned about ensuring the health of the captive population in order to provide for future reintroductions. The Service was also- and still is-

concerned about landowner support. These concerns culminated in a recommendation to suspend releases at that time.

Q: Joe mentioned the possibility of putting collars on Red Wolf pups to aid in identifying them for safety. He mentioned leather collars without radios. Wouldn't any collar need to be made of a material that will "grow" as the pup grows?

A: This was mentioned during the meeting only as an example of a potential idea for consideration. Any potential red wolf management action is discussed thoroughly with experts and takes into consideration the health and well-being of the red wolves before being implemented. Any potential collars used would likely be tested first in a controlled environment, such as a zoo or wildlife conservation center, to ensure its safety and effectiveness. The well-being of the animals is always among our highest priorities.

Illegal Take of Red Wolves

Q: What penalties will be levied against hunters who kill red wolves?

Q: What is being done to address the illegal killing of these animals by landowners in E NC, and what is being planned to stop it?

A: Red wolves are a federally protected species under the ESA. Killing or harming a red wolf can result in civil and/or criminal penalties that may include fines and forfeiture of any property used in the crime. The Service and its law enforcement division work closely with local law enforcement to investigate suspected illegal take of red wolves. Additionally, the Service will be working with the community to help hunters and landowners avoid accidental shootings. Steps we plan to take include: continuing to collar all red wolves with bright orange radio collars (new releases of captive-born red wolves and all wild red wolves once captured – young red wolves less than about 8 months old are too small for radio collars), attaching orange reflective material on all red wolf collars, species identification cards, and information brochures.

Q: What can we do with the law and individual efforts to protect these beings?

Q: How are you protecting these animals going forward?

A: We continue to work with local and state governments, conservation organizations, private landowners, and other partners in red wolf conservation. Having broad support is essential to the future success of the red wolf program. To that end, the Service created the Prey for the Pack program in 2020. Prey for the Pack is a habitat improvement program through the Service's Partners for Fish and Wildlife Program, in collaboration with the North Carolina Wildlife Federation, and is available to private landowners interested in and committed to improving wildlife habitats on their property within the NC NEP. The program will help provide both technical and financial support to private landowners to help promote and implement habitat improvement projects that benefit both the landowner and the wildlife that depend on the resource, specifically to promote habitat for red wolf prey species. In exchange for financial and technical support, landowners agree to tolerate the presence of red wolves on their private lands. As the program participants increase, the Service hopes to continue to build additional rapport

and support with landowners throughout the NC NEP to the benefit of private landowners and the conservation of red wolves.

Our team manages the NC NEP through a variety of activities including, but not limited to, monitoring red wolves via radio collars, remote cameras, and scent stations to assess pack movements, pack dynamics, and general health; investigating all known mortalities; performing veterinary care, vaccinations, and genetic health analyses; and promoting education and increasing public awareness through various outreach activities.

Coyote Management in the North Carolina Non-essential Experimental Population Area

Q: How will the hybridization with coyotes be managed?

Q: What is the Service going to do about the coyotes on Alligator River NWR (formerly zone 1 of hybridization management plan)?

Q: How do you stop red wolves and coyotes from crossbreeding and diluting the gene pool?

Q: What can (or will) be done to manage the local coyote population without placing a target on red wolves?

A: The Red Wolf Adaptive Management Plan (RWAMP), sometimes referred to as the Coyote Sterilization Program, was developed to reduce interbreeding between red wolves and coyotes and limit coyote gene introgression into the wild red wolf population while simultaneously building a restored red wolf population. The techniques of the RWAMP have been effective in managing the adverse effects of hybridization on the wild red wolf genome. The Service incorporated much of the RWAMP recommendations as standard operating procedures for our management strategies starting in 2000.

The Service currently conducts coyote sterilization on National Wildlife Refuge lands within the NC NEP and on private lands with landowner permission. This involves capturing coyotes using leg-hold traps, sterilizing and radio-collaring some coyotes, then releasing them at the site of capture. Sterilizations are done by tubal ligation or vasectomy in order to preserve the hormonal integrity of the animals. Sterile coyotes then act as territorial “placeholders”, defending their territory from other coyotes or hybrids. Sterilization does not affect the bond of a coyote pair which mate for life, nor does it impact the size of their territory or the vigor with which they defend it, meaning they will continue to limit the intrusion of “new” coyotes into their territory, thus limiting the overall population. Additionally, sterile coyotes are not capable of breeding with other canids, effectively limiting the growth of the coyote population and limiting hybridization with wild red wolves. Ultimately, the “placeholder” canids are replaced by red wolves either naturally (e.g. displacement) or via management actions (e.g., removal followed by pairing wild or translocated red wolves into the territory).

In addition to the benefits to red wolves and limiting the growth of the coyote population, managing the coyote population is also an effective means of reducing predation on popular game species such as small game mammals and birds. Maintaining a sterilized coyote pair on the landscape has been shown to reduce predation on game animals primarily because the pair no longer provides food for pups every year.

A trapping permit issued to the Service by the NC WRC includes these coyote sterilization activities. The Red Wolf Team works closely with as many willing landowners as possible to identify private land areas where red wolves are present, and where management actions such as coyote sterilization may be implemented with landowner consent. On private lands, the Red Wolf Team and the landowner will coordinate trapping efforts, which will typically occur during the fall and winter months. Sterilizations occur at no cost to the landowner. Prior to being released at the site of capture, sterilized coyotes will be fitted with white VHF collars starting in winter 2022 (sterilized coyotes captured in previous years were fitted with black VHF collars) so the animals are identifiable and trackable. When possible, trapping attempts will continue until all coyotes on the property are caught and an adequate number of coyotes are sterilized. Trapping will be initiated when there is any indication, such as reports from the landowner or pictures from remote sensing cameras, that an unsterilized coyote is present on the property.

Q: Has the USFWS defined what a “pure” red wolf is?

A: No. The Service currently defines a red wolf for management purposes in the NC NEP as a canid comprised of at least 87.5% known red wolf genes. At the beginning of the reintroduction of red wolves into eastern North Carolina in 1987, the threshold was 75% based on the best available science at that time. Canids captured that were below that threshold were removed from the landscape. Advances in genetic analysis and declining hybridization with an increasingly large red wolf population enabled the Service to revisit this threshold and raise it to 87.5% to more aggressively target introgression.

Q: Will you allow the red wolf to breed with coyotes to produce an aggressive hybrid? How will you track the red wolf population?

A: Our management is geared toward minimizing hybridization between red wolves and coyotes. Nonetheless, hybrid litters do occur. Red wolf-coyote hybrids are generally intermediate in size and exhibit behavior between that of red wolves and coyotes. There has never been a documented incidence of an attack on humans by a red wolf, and documented cases of attacks on people by coyotes are rare. Hybrids are no more aggressive toward people than either of the parent species.

The Service monitors the red wolf population by fitting as many adult red wolves as possible with telemetry collars so that their location can be confirmed at least weekly. All captive-bred red wolves released into the eastern NC population are fitted with collars equipped with both GPS and VHF transmitters so that location information is received daily when they are first released and 2-3 times a week after they settle into a territory. The Service also places telemetry collars on all the sterilized coyotes used to manage hybridization. These animals are also monitored.

Q: How many placeholder coyotes are placed around red wolf pairs?

A: There is no set number of placeholder coyotes designated to be “placed” around red wolf pairs. It is site specific and dependent on the conditions in each area, the existing presence of coyotes, and the ability to capture and sterilize those individuals. It is important to note that

coyotes that are captured and sterilized are not relocated and placed elsewhere; they are released at their original capture site. If they are resident animals (e.g., not transient) then they will continue to defend their territory against other coyotes until (if/when) their territory encroaches on an established red wolf territory and the red wolves displace them.

Red Wolf Reintroductions

Q: Why isn't more being done to save the red wolves? Why are they not all over the east coast where they belong?

A: The red wolf was once common throughout the eastern and southcentral United States. However, populations were decimated by the early part of the 20th Century due to intensive predator control programs and loss of habitat. By 1972, the red wolf was reduced to a small coastal area in southeast Texas and southwest Louisiana. To prevent extinction of the species, the Service established a formal recovery program and began trapping canids in the Texas-Louisiana area to establish a red wolf captive breeding program with the intention of returning the species to areas within its historic range.

Currently, there is only one population of red wolves in the wild. While that population saw many successes, there have also been many challenges. The NC NEP has rapidly declined due to anthropogenic mortality, such as gunshot mortality and vehicle strikes, coyote introgression and hybridization, and other factors. All of these factors, but particularly coyote introgression/hybridization, have a larger impact at low red wolf population numbers. Additionally, due to the importance of private lands to red wolf conservation, there are also myriad socio-political factors involved. Fundamental change is needed in the way stakeholders are engaged in the management of wild-ranging red wolf populations. The Service is committed to increasing landowner and stakeholder engagement, communications, and transparency in all our actions. These factors will also need to be carefully evaluated in the analysis of potential new reintroduction sites.

Because of the patchwork of landowners that comprises the entirety of the southeast, to be successful, any red wolf population would need the support of a myriad of people including, but not limited to, private landowners, state wildlife management agencies, the general public, and others.

Q: Are there plans to release red wolves in a second reintroduced population? What is the timeframe?

A: We currently do not have a set timeframe for establishing additional red wolf populations. We are focused on updating the Red Wolf Recovery Plan, which we anticipate will include the evaluation and identification of potential reintroduction sites as a high priority. With only one population in the wild, additional populations are very important to red wolf viability and its ability to persist in the wild.

Recovery Planning

Q: Is Leo Miranda no longer in a supervisory position over the red wolf recovery program, now that Catherine Phillips has joined the team?

A: Leo Miranda is now the Regional Director for the South Atlantic-Gulf and Mississippi Basin Regions. Catherine Phillips is the Assistant Regional Director for Ecological Services, a position that Leo Miranda held when he more directly managed the red wolf recovery program.

Q: Is the Service planning to have a reintroduction subcommittee as a part of its new recovery team, to identify new reintroduction sites?

A: At this time there's no plan for a reintroduction subcommittee; however, that could happen in the future. Currently, we anticipate the recovery planning efforts of the recovery team to include identification of potential reintroduction sites as a high priority.

Q: Does the Service plan to include a collaborative stakeholder group to help shape the new recovery plan?

A: Yes. A new, diverse Red Wolf Recovery Team was established to update the current red wolf recovery plan and develop a recovery implementation strategy. This recovery team consists of Federal and State agencies, Tribal representatives, County government, academia, zoos/wildlife conservation centers, non-profit organizations, non-governmental organizations, and landowners.

Private Landowners

Q: Has anyone asked Congress to fund robust landowner incentives for hosting the red wolves on private property?

A: Federal funds via the Service's Partners in Fish and Wildlife program are used to support the Prey for the Pack program that provides private landowners within the NC NEP funding and technical assistance to conduct habitat improvement on their lands to meet their management goals while allowing for the presence of red wolves on their lands.

Surveys conducted within the NC NEP have indicated that a straight "pay for presence" type of incentive is likely not what the majority of landowners feel would be the most effective way to ensure the safe presence of red wolves on private lands.

Q: What is being done to repair relationships between USFWS, local private landowners, and red wolf advocates and their orgs?

A: A main component of the Service's revitalization of red wolf recovery is a focus on collaboration and community and partner engagement to recover this species. The Service is working to provide support to landowners and stakeholders by increasing engagement, communication, and transparency in all our actions.

Q: As the red wolf population re-builds, will there be a compensation program for livestock owners who lost livestock to red wolves?

Q: Any plans for reimbursing landowners for value of livestock taken by red wolves?

A: The Service may consider whether such a program would be appropriate here. We acknowledge that threats to livestock from red wolves has been a concern for landowners since the reintroduction of red wolves into eastern North Carolina in 1987. Concerns of low density of prey for reintroduction is very understandable. However, our experience thus far is that such depredations are not common. In fact, red wolves in northeastern North Carolina have been responsible for only 9 confirmed livestock and pet depredations (e.g., goats, chickens, barn cats) over the course of the 35 years since reintroduction. Although, it is reasonable to assume that not every red wolf depredation on livestock has been documented, the red wolf introduction program will continue to include intense monitoring for depredation. The Service does not anticipate the number of depredations to substantially increase. It is also worth noting that there have been no depredations on larger livestock species, such as cattle, though their presence is somewhat limited within the NC NEP. Additionally, Service personnel involved in the investigations of the depredations have anecdotally noted that the vast majority of the red wolves involved, when it could be determined, were older individuals in poor condition with highly worn teeth or animals that were injured, likely making it more difficult to catch natural prey. Other species found to be responsible for depredation incidents investigated as potential red wolf depredations include domestic dogs, coyotes, fox, bear and raccoon. Domestic dogs were found to be responsible for nearly 60 percent of all depredations responded to in which a culprit could be identified.

Q: If any landowners adjacent to the NWR are selling their land is there a first right of refusal for the NWR to annex that land into the refuge? Is this something that is desired so there is less fragmentation in the vicinity of the refuges?

A: The Service approaches conservation through the purchase of fee-title and easement acquisitions only from willing sellers within approved acquisition boundaries. Any landowner interested in learning more about the acquisition process and opportunities may contact the Alligator River and Pocosin Lakes NWR headquarters offices.

Education and Outreach

Q: USFWS is a Federal agency that uses Federal resources, why is outreach targeted, if not limited, to the local community?

A: We are interested in input from all our stakeholders involved in red wolf recovery but this particular meeting was designed to target the local community; those folks living in and around the five counties in the NC NEP and in close proximity to areas where we plan to release red wolves. Landowner support is critical to recovering the red wolf. Fundamental change is needed in the way stakeholders are engaged in management of wild-ranging red wolf populations. This meeting was an opportunity for the Service to speak to and hear directly from the local

community and local stakeholders. Having said that, the meeting was virtual and anyone from the public was welcome to join.

Q: Also, myself and others feel like access to any information on the recovery program is hard to find. I know there is the website for someone that is looking but that is not being put in front of the public on a regular basis. I think social media platforms dedicated to the Red Wolf Recovery Program (not just for general FWS) could be a massive help in getting the public's awareness and support. Most people I talk to don't know anything about the wolves' recovery or even that we have them in NC. If there was a presence on Instagram, twitter, Facebook, etc. that posted regular updates I think it would really make a difference.

A: This is great feedback. As part of the Service's revitalization of red wolf recovery, we are looking to improve communication with the public. We will be sure to look for ways to improve the ability of the public to directly communicate with Service personnel, particularly through avenues such as the Red Wolf Recovery Program website and social media.

Research

Q: Are there any checks of DNA on large canids in coastal states?

A: Studies are underway to identify the possibility of red wolf ancestry still remaining in the wild canid populations in southwestern Louisiana and southeastern Texas. These studies follow-up on previous studies (Murphy et al. 2018 and Heppenheimer et al. 2018) that suggest red wolf ancestry may still exist on the landscape in Louisiana and Texas.