

## 2022-2023 Management Activities

### *Eastern North Carolina Red Wolf Population (ENC RWP)*

On October 4, 2022 and May 9, 2023 the Service hosted in-person public meetings in Columbia, NC and Swan Quarter, NC, respectively, and on October 5, 2022 and May 10, 2023 the Service hosted virtual public meetings to talk about the status of Red Wolf recovery, the planned releases of captive adult Red Wolves, coyote sterilization, Prey for the Pack, and increased community engagement.

In late fall/early winter 2022, six Red Wolves (3 individual males and a family group of 3 – breeding pair and a pup) from the Red Wolf SAFE population were transferred to the Service for eventual release within the ENC RWP in Spring 2023. Additionally, a wild female Red Wolf was captured and translocated to eastern North Carolina from St. Vincent NWR in Fall 2022.

One male from the SAFE population was placed in an acclimation pen on Alligator River NWR with the wild female Red Wolf translocated from St. Vincent NWR. The other two of the males from the SAFE population were placed in separate acclimation pens with wild female Red Wolves captured within their territories on Pocosin Lakes NWR. These two wild female Red Wolves were fostered into a den in 2021. The family group from the SAFE population was placed in an acclimation pen on Pocosin Lakes NWR. Acclimation pens were placed in areas where there were no existing Red Wolf pairs and the area provided adequate prey densities and security. All Red Wolves to be released were collared with orange GPS/VHF collars with orange reflective material prior to placement in the acclimation pens.

The plan was to leave them in the acclimation pens through the breeding and whelping season because the best available information and experience indicates that when trying to form new Red Wolf pairs, they are more likely to stay together and stay in the area of release when they have pups, even if the pups don't survive.

Each of the adults/juveniles were fitted with orange GPS/VHF collars for tracking purposes and to identify them as a Red Wolf and illegal to shoot, as well as orange reflective material to increase their visibility along roadways. Each collar has a black letter or number on it to help identify them on remote sensing cameras and during sightings.

Red Wolf ID	Letter/Number on Collar
2322F	F
2344M	G
2359F	4
2326M	E
2361F	D
2307M	H
2287F	I
2132M	J
2409F	K

In January 2023, wild adult male 2101M was a mortality within his normal home range on private land. He was almost 9 years old and in poor health with mange and a heart condition. Not long before his death, we observed him with a substantial leg injury.

In January/February 2023 the 5 Milltail pups from the 2022 litter, 3 females (2412F, 2413F and 2414F) and 2 males (2410M and 2411M), were captured and fitted with radio collars. When captured they ranged in weight from about 40 pounds to almost 55 pounds and will continue to grow. They have orange radio collars to identify them as Red wolves to help with their protection and to allow for monitoring, particularly as some or all of them will naturally disperse over the next year or so. Each of their radio collars also has reflective material to increase their visibility along roadways and a letter to help identify them on remote sensing cameras and from sightings.

Red Wolf ID	Letter on Collar
2410M	S
2411M	R
2412F	M
2413F	O
2414F	N

In March 2023, wild adult female 1849F, one of the well-known and key wild Red Wolves on Alligator River NWR for more than a decade, passed away of natural causes. Born in 2010 on the Refuge, 1849F spent her life there and was the matriarch of the Milltail family group for many years, including having 3 litters and 14 pups over her 13 years of life in the wild.

In April 2023, 2029F, a 10-year old wild female Red Wolf, was discovered dead on private land during routine radio telemetry tracking. A cause of death cannot be determined.

In April 2023, the breeding female of the Milltail family group (2225F) on Alligator River NWR had a litter for the second year in a row. The litter was 5 pups (3 females, 2 males) born on approximately April 11, 2023. On April 20, 2023, USFWS located and entered the den to do a general health check of the pups, take genetic samples and microchip them for future identification. Through coordination with the Red Wolf SAFE program, it was determined that there was one litter born in a SAFE facility close enough in time to the wild litter to conduct pup fostering. Because the wild female already had 5 pups in the wild litter, it was decided to only foster in one pup so as not to overburden her. On April 23, 2023, a male pup from the SAFE population was flown to the ENC RWP and transferred to USFWS. On the morning of April 24, 2023, the foster pup was placed into the wild den creating a litter of 6 pups (3 females, 3 males).

In April 2023, one of the newly formed pairs consisting of a wild female within her territory and a male from the SAFE population, and the family group from the SAFE population, each had 4 pups while in the acclimation pens, though one of the pups was a mortality prior to release. The other newly formed pairs in acclimation pens did not have pups and were released in early May. The pairs with pups were released in late May when the pups were around 6 weeks old and mobile enough to ensure they would be able to follow their parents out of the acclimation pen. Releases from the pen consist of placing remote sensing cameras around the pen the day prior to document their release and then on the day of release simply opening the door and leaving. They are then free to come and go from the pen as they choose.

Every newly released Red Wolf was tracked, monitored and their status assessed on a daily basis following release. Newly released Red Wolves were also supplementally fed with natural prey items when and where feasible to help with their transition to the wild. Additionally, Service staff contacted private landowners where Red Wolves were known to be spending time, based on tracking/monitoring. This was done to make landowners aware of the presence of Red Wolves and to address any potential concerns or issues.

On May 18, 2023, the Red Wolf field team received, and subsequently verified, a mortality notification for 2326M, a male from the SAFE population who was released from an acclimation pen on Pocosin Lakes NWR earlier that month. On 8/7/23, USFWS law enforcement issued a press release offering a \$5,000 reward for information regarding this mortality on private land that was confirmed to be from gunshot.

In May 2023, the male (2344M) from the SAFE population released from an acclimation pen on Alligator River NWR in May 2023, was captured by the Red Wolf field team due to substantial concerns regarding his ability to survive in the wild as a result of his unwillingness to leave a rural neighborhood and his complacency around people and

pets, despite repeated hazing/harassment over several days. He was subsequently

In June 2023, the 14-year-old wild female Red Wolf (1743F) on Alligator River NWR was found to be in mortality mode during routine tracking. She was subsequently found to have died within a wood block in the Milltail area. Necropsy results confirmed she died of natural causes. She was born in the Milltail area in 2009 and spent the majority of her life on the bombing range which is surrounded by Alligator River NWR, but in recent years split her time between the bombing range and the Milltail area. She is the oldest known ever wild Red Wolf on record.

In July 2023, during routine radio telemetry monitoring in the Pungo area of Pocosin Lakes NWR, a 7-year-old wild female Red Wolf (2197F) was in mortality mode and subsequently found on the shoulder of a road. Necropsy results are pending. She was the wild female Red Wolf that pups were fostered with in 2021.

In July 2023, a Red Wolf pup (2522F) was reported injured on Pocosin Lakes NWR. That pup later died as a result of her injuries, despite efforts to save her, including extensive efforts at the NCSU Veterinary Hospital. Later that same day a mortality notification was received for her father, the breeding male (2132M) of the family group from the SAFE population released on central Pocosin Lakes NWR in late May. Necropsy results are pending on both mortalities and are part of an ongoing law enforcement investigation. Shortly after these mortalities, the captive-born breeding female (2287F) of this family group dispersed from the refuge for the first time and later became involved with the depredation of chickens on multiple occasions. She was captured on 9/29/23 by the Red Wolf field team and placed back into the SAFE population. Monitoring to date appears to indicate that the remaining pups from this family group were likely abandoned after the mortalities and 2287F's move off the refuge.

In July 2023, the Red Wolf field team received a mortality notification for the wild female Red Wolf (2322F) that was translocated from St. Vincent NWR and released in early May 2023 on Alligator River NWR. Necropsy results are pending as part of an ongoing law enforcement investigation.

In September 2023, an orange collared Red Wolf was reported dead along Highway 64 on the section running through Alligator River NWR. Once on the scene, the Red Wolf team identified the mortality as the wild male Red Wolf (2323M) who was the male of the of the Milltail family group. Necropsy results indicate that the cause of death was a vehicle strike.

As of September 2023, the Pungo family group on Pocosin Lakes NWR consisted of the breeding pair (2361F and 2307M) and two pups.

As of September 2023, the Milltail family group on Alligator River NWR consisted of the breeding female (2225F), 5 yearlings (2410M, 2411M, 2412F, 2413F and 2414F) and 6 pups.

Service staff have continued to develop additional Prey for the Pack agreements throughout the ENC RWP and have completed some in key locations adjacent to Alligator River NWR. Prey for the Pack agreements are tailored to each landowner and include technical and financial assistance to them to implement habitat improvement projects that benefit the landowner and wildlife. Each agreement includes a commitment by the landowner to allow Red wolves to use their property without harassment. Depending on the comfort of the landowner, additional activities, such as trapping and coyote sterilization, may also be included. The Service and its partners are also continuing to look for ways to expand this program or develop sister programs suited to the needs of local landowners.

*St. Vincent National Wildlife Refuge, Florida (SVNWR)*

There is currently a pair of Red Wolves on St. Vincent NWR, but a successful litter was not documented in 2023 based on monitoring.