### Share with Wildlife Interim Report; FY21: 17 January - 30 June 2021

# American Mink (Vison vison) Habitat and Population Survey in Northern New Mexico Contract #21-516-0000-00025

#### We have been tasked:

- To conduct non-invasive surveys in 2021 in northern New Mexico (NM) to determine whether American mink are present.
- To collect data from up to 128 camera sites for 2-4 weeks in eight HUC 8 watershed units (up to 16 sites per watershed, in various seasons).

#### Summary

In FY21, we have set up 48 camera sites in six HUC 8 watershed units (3-17 cameras in each). We have monitored 45 of those for 2-8 weeks (see attachment). **We have not yet found any sign of mink.** 

We have photos of other mustelids (marten, long- and short-tailed weasels) but these are not riparian-obligate species. We have photos of many mink predator and prey species.

We are finding precious few places that have both open water year-round and minimal grazing impacts, historic and/or current. We continue to survey locations that may be refugia (e.g., Cimarron Canyon) and places that appear to have suitable habitat with proximity to existing mink habitat and possible populations in Colorado. We are surveying places where water is not known to be open year-round (upper watersheds) on the basis of historical records and on the chance that climate change may be affording habitat again for any dispersing mink.

We have spent our FY21 budget.

Our criteria for selecting camera sites include:

- Most recent mink records
- Proximity to existing mink habitat and possible populations in Colorado
- Perennial, or nearly perennial, open water (e.g., beaver ponds, lakes, perennial rivers and streams)
- Shrubby riparian habitat for cover and/or adjacent herbaceous habitat capable of supporting ample prey species
- Minimal grazing impact, both past and present (e.g., Cimarron Canyon, Rio de Los Pinos and Rio de Las Trampas canyons; Our Lady of Guadalupe Abbey on the Pecos River)
- Habitat protection (e.g., Stewart Meadows Wildlife Viewing Area [if it were in fact protected from cattle], some private properties)
- Access. At first, snow or winter camping conditions limited high-elevation access and multi-day field work, and some private landowners have not been interested in participating (e.g., Watrous and Navajo River areas).

The most recent mink records in NM:

- 2001 Pecos River, near Lisboa Hatchery (observed). Others observed (years not specified): Pecos Baldy Lake, Vallecito River
- 1995 Rio Mora (observed)
- 1992 Rio Grande, at San Antonio, Socorro County (observed)
- 1987 Cimarron Canyon, 0.25 miles west of Clear Creek (roadkills)
- 1967 Mora River, 3.5 miles east of Watrous (several trapped)
- 1966 Mora River, at Watrous (several trapped)
- 1940s Northern NM, including the Rio Grande and Chama rivers ("plentiful")
- 1938 Southwest Colfax County, including Angel Fire, upper Coyote Creek, Cimarron (reported)
- 1919 Rio Grande, at Los Lunas, Valencia County (skull)
- 1908 San Juan River, at Liberty and Fruitland (trapped nearby)
- 1905-8 Animas and San Juan rivers, at Farmington area (diminishing numbers trapped)
- 1904 Costilla River, 5 miles below confluence with Comanche Creek 9,600' (specimen) and tracks common down to Costilla at 8,000' (tracks, reported)
- 1904-5 Upper Rio Grande, at Velarde and Alcalde (4 skulls from that winter)
- 1903 Pecos River above 8,000' ("rare"; skins and skulls observed)
- 1892 La Plata River, San Juan County (one trapped)

During the period 17 January - 30 June 2021, we have:

- Set up and serviced 48 camera sets in six HUC 8 watersheds (3-17 in each) [38% of "up to 128 sites"]
  - Canadian Headwaters 0
  - Canadian, Upper 3
  - Cimarron 7
  - Mora 9
  - Conejos 0
  - Upper Rio Grande 18
  - Chama 8
  - Pecos Headwaters 3
- Set up five track plates in five HUC 8 watersheds (Upper Canadian, Chama, Upper Rio Grande, Cimarron, and Mora) [63%]

## • Detected no mink (no sign, no photos)

- Photographed the following species:
  - Mustelids: Marten (Rio Brazos), short-tailed weasel (Rio Chamita), long-tailed weasels (Rio de Las Trampas)
  - Domestic animals: Bison, cattle, yak, cat, dog (and humans)
  - Other large mammals: Black bear, bobcat, cougar, coyote, mule deer, elk, gray fox, cottontail rabbit, raccoon, ringtail, striped skunk
  - Rodents: North American beaver, chipmunk spp., gopher, muskrat, Abert's squirrel, golden-mantled ground squirrel, rock ground squirrel, red squirrel, vole, wood rat, small rodent spp.

- Screened 75 data cards with 2-4 weeks of data on each, and catalogued all animal photos on an external hard drive, as these could be useful baseline data for other surveys.
- Purchased two GPS units, an external hard drive, 10 data cards for cameras, one pair of hip waders, Virkon disinfectant and spray bottles, mink lure, track-plate materials. We have also paid for a notary signature, camping fees, postage, duplicates of cable-lock keys, copies of data sheets and literature. (Durable equipment is to be returned to NMDGF.)
- Spent our total FY21 budget (\$15,733).

Places where we anticipate placing more cameras for 2-4 weeks (~70 possible sites):

J. Frey (*pers. comm.*) feels that mink are most likely to be found in NM along the San Juan, Animas, and La Plata rivers. We would like to submit the necessary paperwork to add the San Juan HUC unit to our survey area in FY22.

Canadian Headwaters

- Cornell Ranch (private)
- Carson NF

[We may not be able to identify 16 sites in this watershed unit.]

Cimarron

• (fall-early winter)

Upper Rio Grande

- Beaver Creek/Cruces Basin Wilderness
- Rio de Los Pinos/Cruces Basin Wilderness (lower in canyon)
- Rio del Pueblo (above Sipapu)
- Rio Nutrias/San Antonio
- Rio Hondo
- Rio Quemado
- Embudo
- Santa Barbara east, west and middle forks (summer)
- Private land on Rio Costilla

Rio Mora

- Watrous area/private
- Fort Union Ranch

Pecos

- Our Lady of Guadalupe Abbey/private, early winter
- Carson NF above 8,500'
  - [We may not be able to identify 16 sites in this watershed unit.]
- Track plate

Rio Chama

- East boundary of E. Sargent WMA
- Rio Chama, above El Vado Reservoir high-water line
- Rio Chama above Heron Lake
- Rio Vallecitos, Vallecitos Mountain Retreat Center/private and Carson NF, south of Rt. 64
- Rio Brazos tributaries/private (summer & early winter)

- El Rito, Carson NF and private
- Track plate

Conejos River

• (summer & early winter)

[We may not be able to identify 16 sites in this small watershed unit.]

• Track plate

San Juan '

- San Juan mainstem
- Animas
- La Plata

[We may not be able to identify 16 accessible sites in this watershed unit.]

• Track plate

Areas that we have scouted and found to be not promising:

- Navajo River No access granted yet
- Coyote Creek above the State Park (Rio Mora) steep river, no beaver, not enough open area
- Coyote Creek, below Boyle's (Rio Mora) no longer perennial
- Rio Mora, Watrous area Private, no access granted yet
- Cimarron River above the State Park too steep, no beaver, not enough open area
- Maxwell NWR (Canadian) too dry, isolated from other riparian areas
- Costilla Creek, RCCLA (Upper Rio Grande) no access granted
- Comanche Creek (Upper Rio Grande) not likely to have open water in winter

Respectfully submitted,

Martha Peale Owner, Peregrinations 30 June 2021