

# Sharing the Shoreline

## 2021 John Martin Reservoir Piping Plover and Interior Least Tern Newsletter



**US Army Corps  
of Engineers®**

Prepared by Dr. Sara Harrod

## What are Piping Plovers and Interior Least Terns?

Piping Plovers (*Charadrius melodus*) and Interior Least Terns (*Sterna antillarum athalassos*) are small, migratory shorebirds. Every spring they travel hundreds of miles to their breeding grounds. One of the places they choose to raise their chicks is John Martin Reservoir.

Adult plovers (**Fig. 1**, top left) have a sandy-colored back, white belly, black collar and “unibrow,” orange and black bill, and orange legs. Juveniles (**Fig. 1**, top right) appear similar to adults but lack the collar and unibrow and have an all-black bill.

Adult terns (**Fig. 1**, bottom left) have black heads with a white triangle on the forehead, grey backs, and yellow bills and legs. Young birds (**Fig. 1**, bottom right) have black bills and a black smudge behind their eye.

## When are they here?

Plovers and terns leave their wintering grounds and travel hundreds of miles to southeastern Colorado. While plovers arrive in mid-April, terns show up in May. The birds leave us at the end of August and spend their winter along the Atlantic Coast of North and South America, as well as in the Bahamas and Caribbean Islands.

## Why are they important?

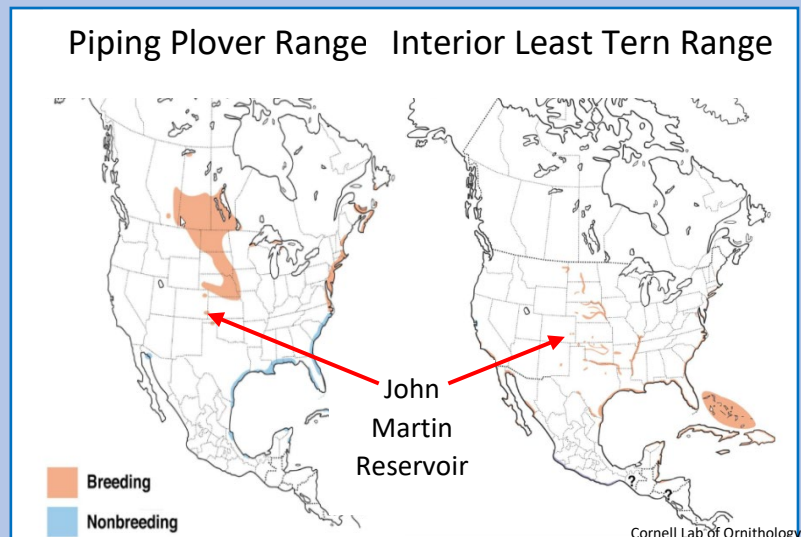
Both species have seen population declines in recent decades, due in large part to habitat loss. Additionally, the populations at John Martin Reservoir are small and isolated (**Fig. 2**). Piping Plovers are federally threatened, whereas Interior Least Terns are classified as endangered by the state of Colorado.



**Figure 1.** Adult (top left) and juvenile (top right) Piping Plovers. Adult (bottom left) and juvenile (bottom right) Interior Least Terns.

## Did you know?

20% of plovers that nest at John Martin Reservoir are known to spend their winters at beaches in Texas.



**Figure 2.** The ranges of Piping Plovers and Interior Least Terns in North America. The John Martin Reservoir populations are indicated by the red arrows.



## What is the U.S. Army Corps of Engineers doing to help?

John Martin Reservoir is managed by the Army Corps of Engineers. The Corps manages the dam to minimize flood risks, conserve water, protect natural resources, and offer recreation opportunities. We partner with Colorado Parks and Wildlife to protect the birds at the reservoir. We remove invasive tamarisk from the shoreline (**Fig. 3**) and temporarily close nesting areas. Rangers monitor the birds and record nesting data. We also educate the public about plovers and terns. Additionally, we partner with the U.S. Geological Survey to band the birds. Banding allows us to identify individuals to estimate chick and adult survival, as well as track migration.

## How can I help?

The easiest and best thing to do is to stay away from nesting sites. Plovers and terns are very wary of intruders. When people/predators enter their habitat, they feel they have no choice but to flee, leaving their eggs and chicks unprotected. Eggs and chicks are also **very** hard to see (**Fig. 4**) and can be accidentally crushed. Nest sites are marked by signs (**Fig. 5**) and brightly colored twine. Please visit the John Martin Reservoir Facebook page and CPW's Visitor Center and kiosk for the most recent closures.

It's also important to pick up litter and throw it away in a trash can. Leftover trash can attract predators, harm wildlife, and potentially injure visitors. If you're fishing, avoid landing in closures and bring all your lines and hooks home with you. Keep your pets leashed; even a well-behaved dog looks like a predator to a nesting bird.

Lastly, help us protect these birds by spreading the word about plovers and terns! Talk to other visitors about what you've learned and follow us on Facebook for future updates.

## What if I have questions?

The Army Corps of Engineers is happy to answer any questions you have. See the bottom of this newsletter for our contact information.



**Figure 3.** A Ranger removes tamarisk from the shoreline.



**Figure 4.** A camouflaged plover chick who walked very close to a Ranger.



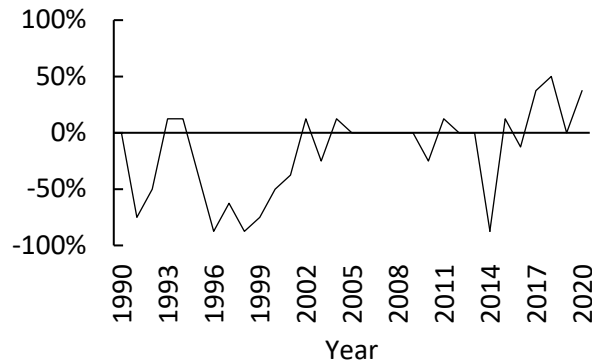
**Figure 5.** A sign marking where birds are nesting.

## Percent of Breeding Pairs of Plovers and Terns

2020 was a successful year for plovers (left) and saw 39% more breeding pairs compared to the program's first year (1990). Conversely, the number of breeding tern pairs (right) declined 73%.



Percent change in number of breeding plover pairs relative to 1990



Percent change in number of breeding tern pairs relative to 1990



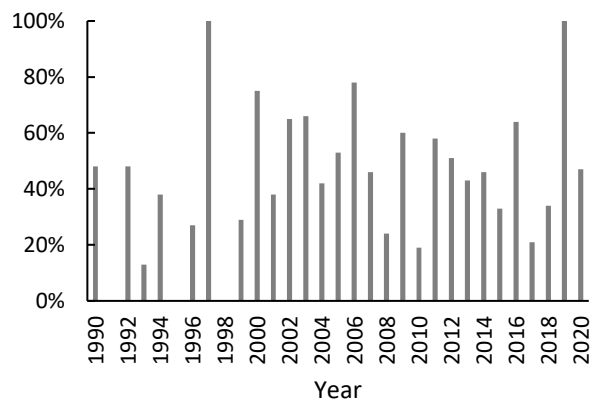
## Percent of Pairs with Chicks Who Left the Nest

Plover nesting success (left) was approximately the same (47%) in 2020 as in 1990.

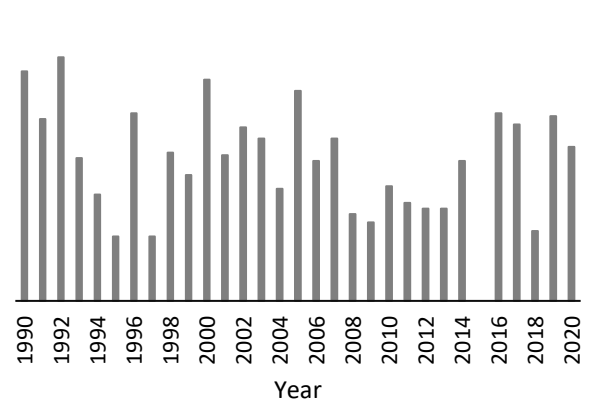
On the other hand, slightly over half of all tern nests in 2020 were successful.



Percent of successful plover nests



Percent of successful tern nests



## John Martin Reservoir Hall of Fame

Below are some of the records from the past 2 seasons. Numbers refer to individual birds.

### Long-Term Relationships

#### **Plovers 64 and 90**

Raised chicks in 2019 and 2020

#### **Plovers 43 and 70**

Raised 2 chicks in 2019 and 3 in 2020

#### **Terns 11 and 14**

Raised chicks in 2019 and 2020



Plover 70 inspects the nest bowl.

### Biggest Families

#### **Plovers 80 and 82**

5 chicks left the nest in 2019 and 2020

#### **Plovers 87 and 89**

4 chicks left the nest in 2020

#### **Terns 14 and 11**

2 chicks left the nest in 2020



Tern 14 after feeding his chick.

### The Next Generation

#### **Plovers 45 and 47**

45 hatched in 2019 to 64 and 90

47 hatched in 2019 to 43 and 70

Nested together in 2020



Plover 45 prepare to incubate her eggs.



### Found a dead bird?

Please contact us immediately (see below) if you find a dead plover or tern. Take a picture and let us know where the bird is. This information is very important and helps us immensely.

### Please Let Us Know

If you see someone in a closed area, please let us (number below) or CPW know (John Martin State Park Office 719-829-1801). A Park Ranger will go and explain why the area is closed.

### Contact Information

US Army Corps of Engineers-John Martin  
Reservoir  
29955 CR 25.75  
Hasty, CO 81044

Office: (719) 336-3476

Website:

[www.spa.usace.army.mil/Missions/Civil-Works/Recreation/John-Martin-Reservoir/](http://www.spa.usace.army.mil/Missions/Civil-Works/Recreation/John-Martin-Reservoir/)

Email: [JohnMartin@usace.army.mil](mailto:JohnMartin@usace.army.mil)

Facebook: [@USACE John Martin Reservoir](https://www.facebook.com/USACEJohnMartinReservoir)

