

# Alberta *Endangered* Piping Plovers and their Unique Relationship with Lakes

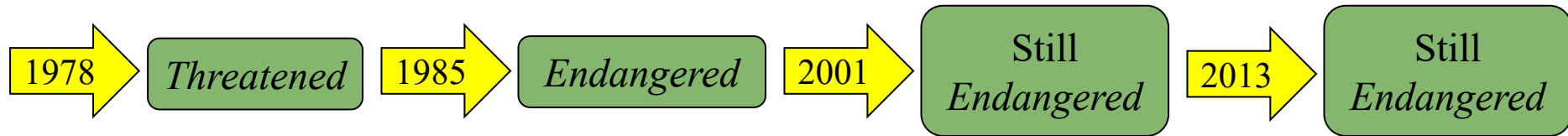


# Identification – similar species

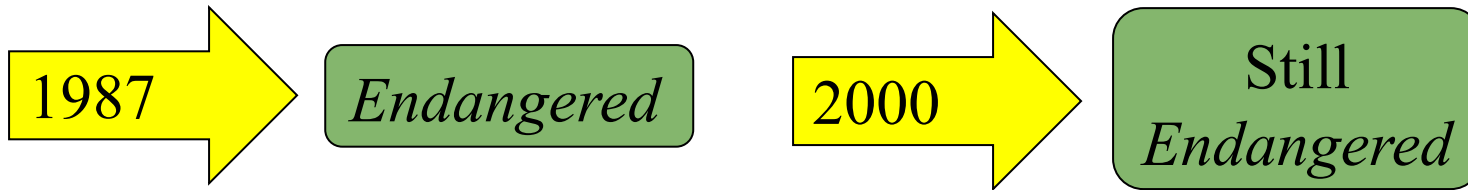


# Status

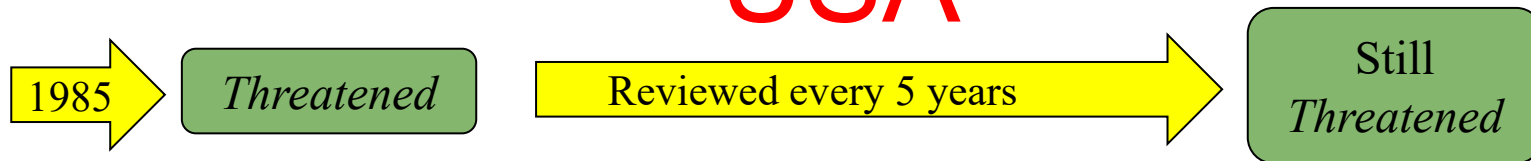
## Canada



## Alberta



## USA



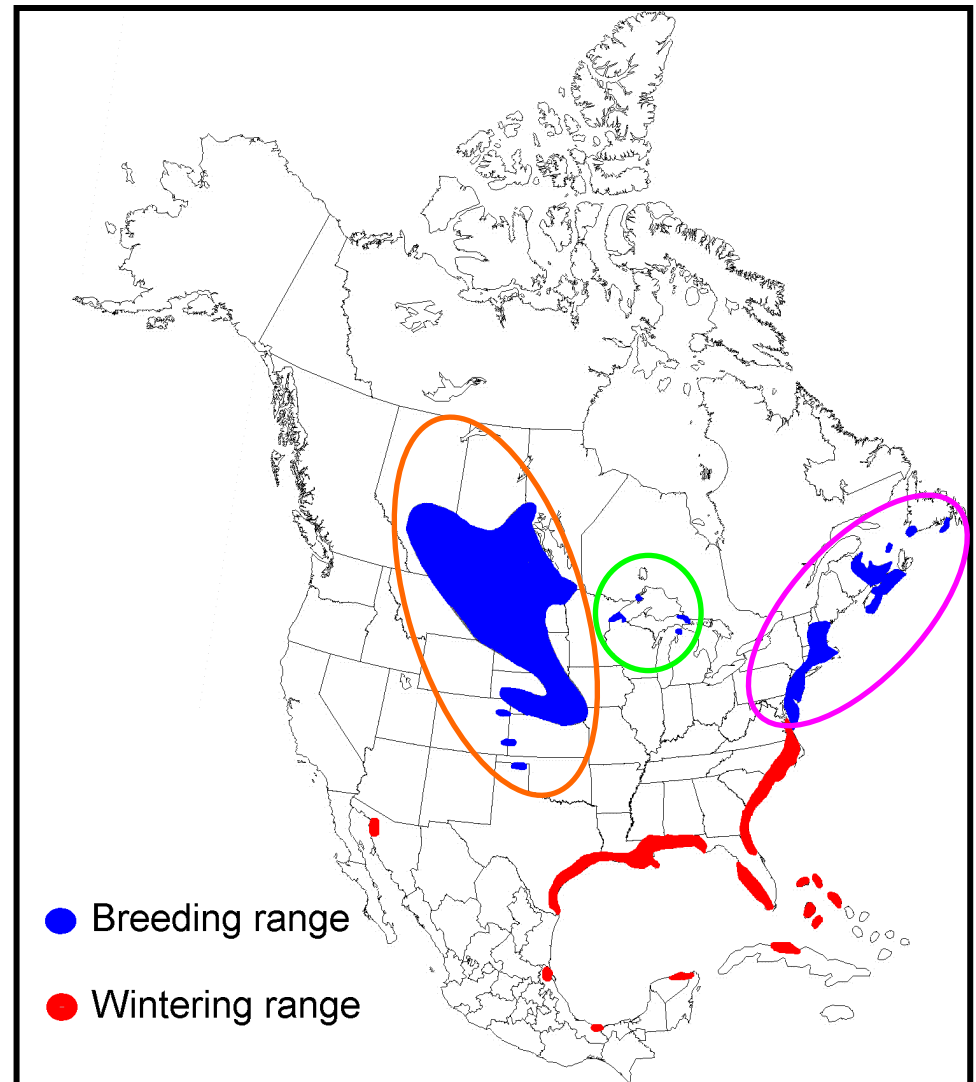
# Range - Breeding and wintering

## ➤ Breeding – Three pop'n

- N = ~7500 in 2016
  - Great plains (3600)
  - Great lakes (160)
  - Atlantic coast (3800)

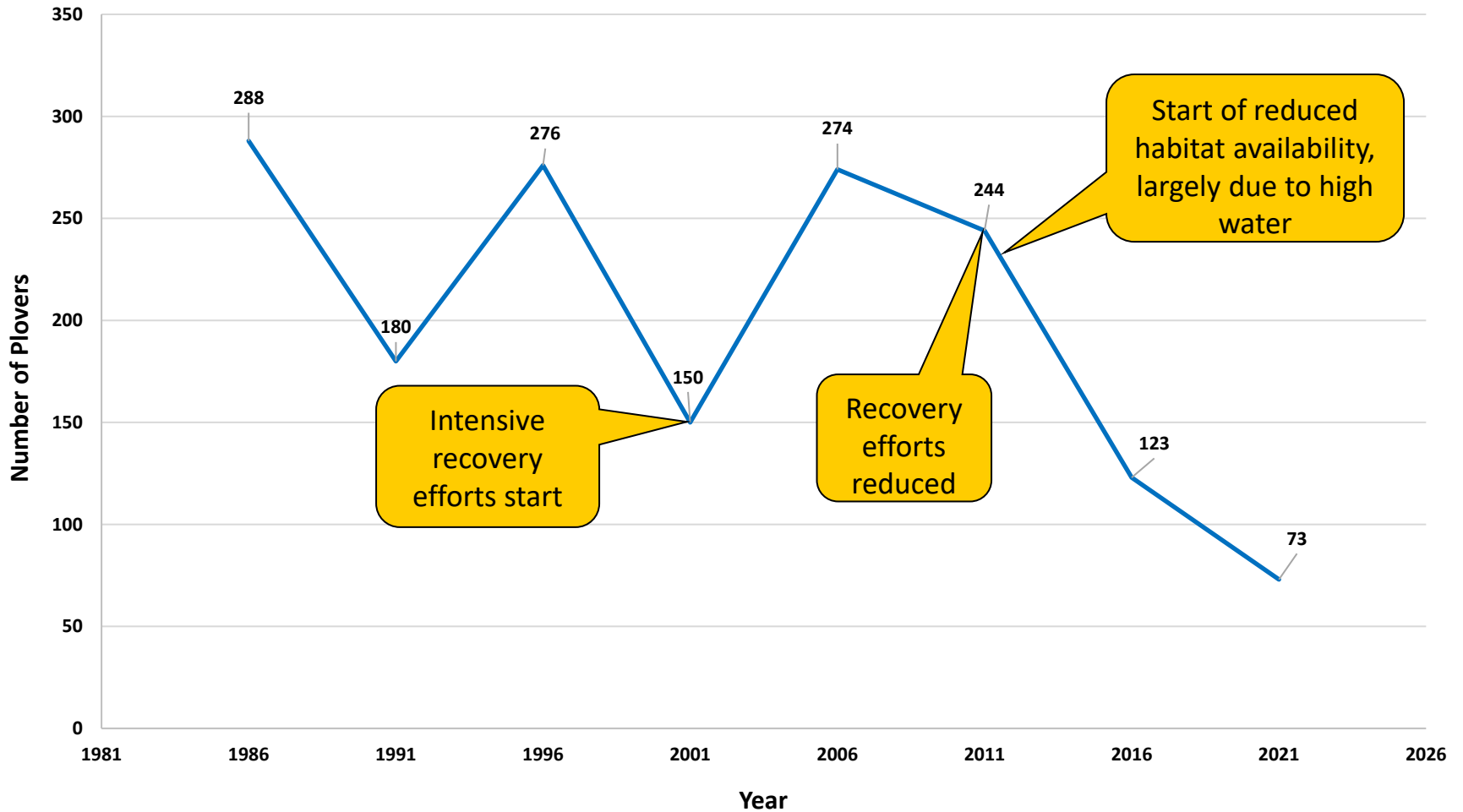
## ➤ Wintering

- Atlantic coast
- Gulf of Mexico
- Caribbean



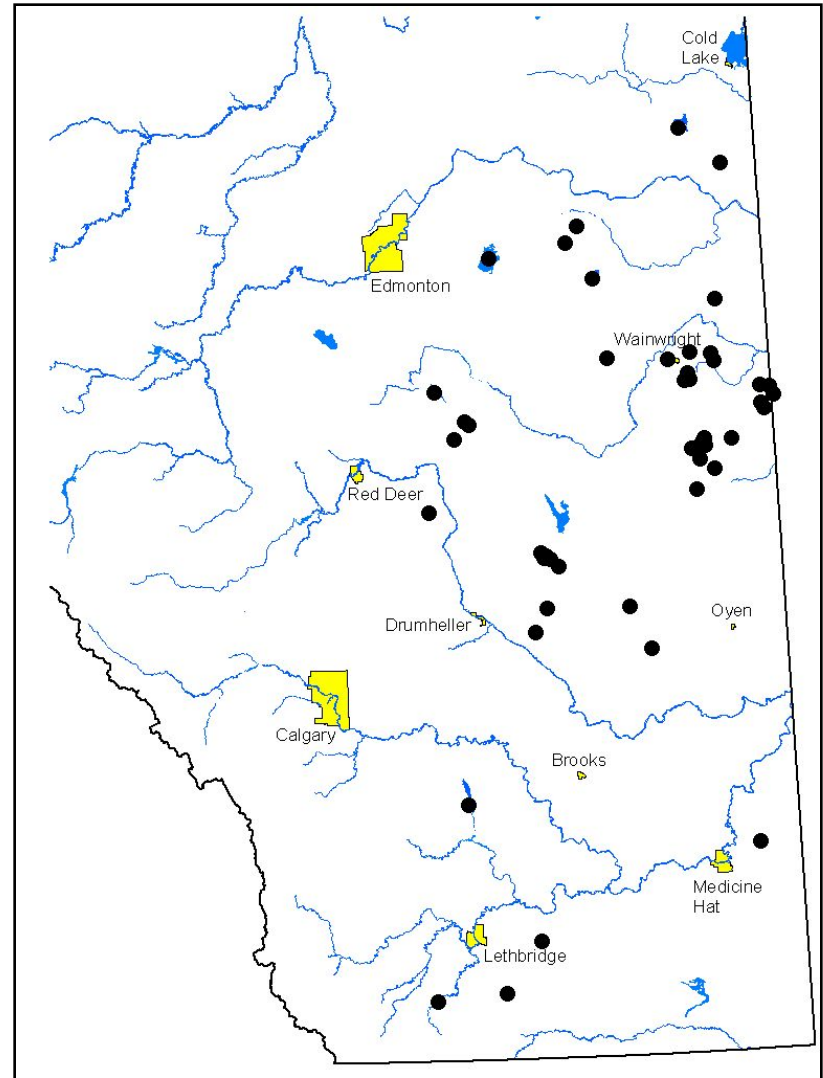
# Alberta Population

## Adult Piping Plovers Counted During International Census Years



# Range - Alberta

- PIPL occur in east central Alberta
  - Muriel Lake most northerly
  - Sporadically on a few reservoirs in the south
- Nice to have eyes on some lakes we don't traditionally expect to find PIPL



# Breeding Habitat - Alberta

- Alkali lakes with large gravelly beaches and sparse vegetation













# Breeding Habitat – Other places









# Wintering habitat





# Biology

- Nest is a shallow scrape lined with small pebbles
  - Camouflage is key!
- The majority of eggs are laid from May 10 – 24





# Biology

- Eggs hatch in mid-June.
- Chicks fledge at ~18 days of age
- Adults and young leave for wintering grounds by late July



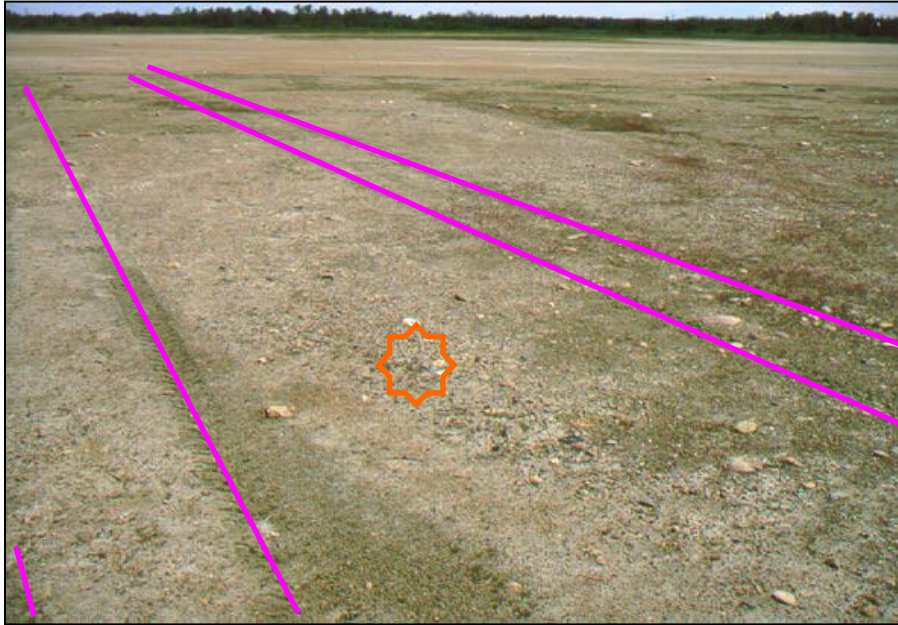
# Threats - Predators



# Threats - Livestock



# Threats – ATV's, 4X4's, tractors



# Threats – Drought and Floods









# What do we do for piping plovers?

- We know they are '*endangered*' ....
- We know where they live....
- We know what the threats are....

So...How do we help them recover?



# Recovery Actions - Habitat Enhancement

- Working with landholders to exclude cattle from nesting habitat
  - 18 landholders
  - 25 wildlife friendly fence projects on 16 lakes
  - 1500 acres protected
  - ~55 km shoreline



# Recovery Actions - Habitat Enhancement



# Recovery Actions - Habitat Enhancement

- Temporary electric fencing
- Cautionary signage



# Recovery Actions - Outreach and Education

## Alberta's Endangered PIPING PLOVER

### What is a Piping Plover?

The Piping Plover is a bluebird-sized shorebird occasionally seen on shorelines of saline lakes and sloughs. Plovers arrive in Alberta from the Gulf of Mexico in late April to breed and raise their young. Nests are established on sparsely vegetated gravel beaches in a shallow bowl lined with pebbles.

### How many are left?

Less than 6000 *Piping Plovers* remain worldwide. Populations in Alberta have declined by half since the mid-1990's to roughly 150 individuals in 2001. Threats to these birds include depredation on nests and chicks, livestock activity, extended drought, off-road vehicle use and other human activities.

### Management on Little Fish Lake

In 1991, shoreline fencing was erected to protect sensitive nesting areas from potential livestock disturbance. Receding water levels have since allowed vegetation to encroach upon high-quality nesting habitat. Cooperative management with local cattle owners and Alberta Parks and Protected Areas uses controlled grazing to reduce vegetation encroachment on plover habitat until water levels increase.

### What can be done to help?

Please avoid walking on gravel shorelines between May 1 and August 1 in order to minimize disturbance to nests and chicks. Dogs should be kept on leashes at all times, and please don't litter, as litter can attract predators. Remember, the *Piping Plover* is an endangered species and harassment is a crime under the *Alberta Wildlife Act*.



Photo Credit: G.M. Arroyave/2013

Piping Plover (*Chondestes melodus*)  
Note the single black chest band, the black forehead band from eye to eye and the white stripe across each eye.



Piping Plover nesting habitat is very sensitive to disturbance so please exercise caution when walking on shorelines.

Management of this endangered species is coordinated by the Alberta Piping Plover Recovery Team:



Environment  
Canada

Environnement  
Canada



# Recovery Actions - Outreach and Education

- Presentations to school groups, youth groups
- Open houses



# Recovery Actions - Outreach and Education

➤ We don't always get through to everyone.....





# Recovery Actions - Productivity enhancement

Given the high number of nest predators, what could we do?

Protect  
the  
nests!













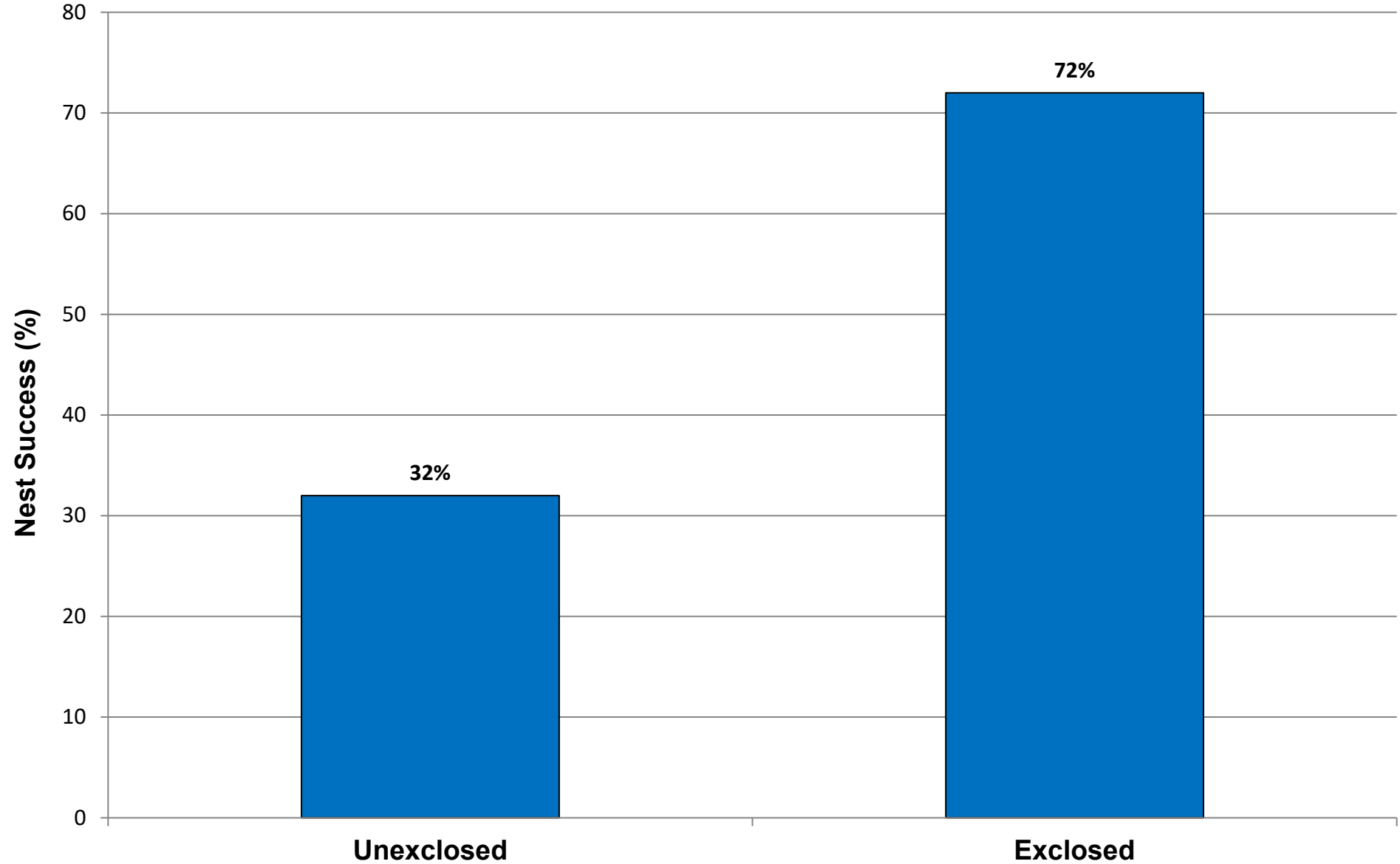




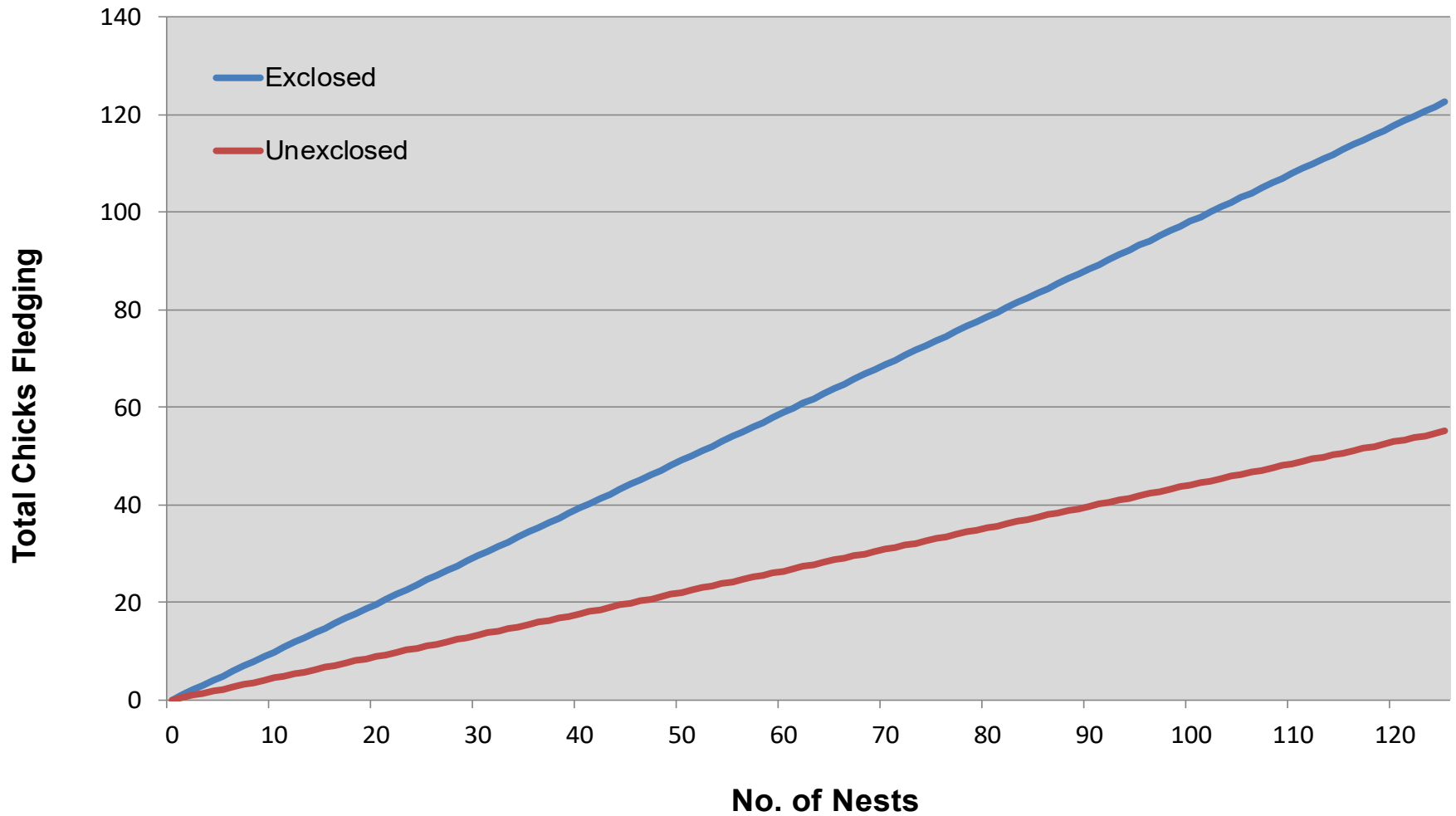


# Recovery Actions - Nest Success Results

(1998-2010)

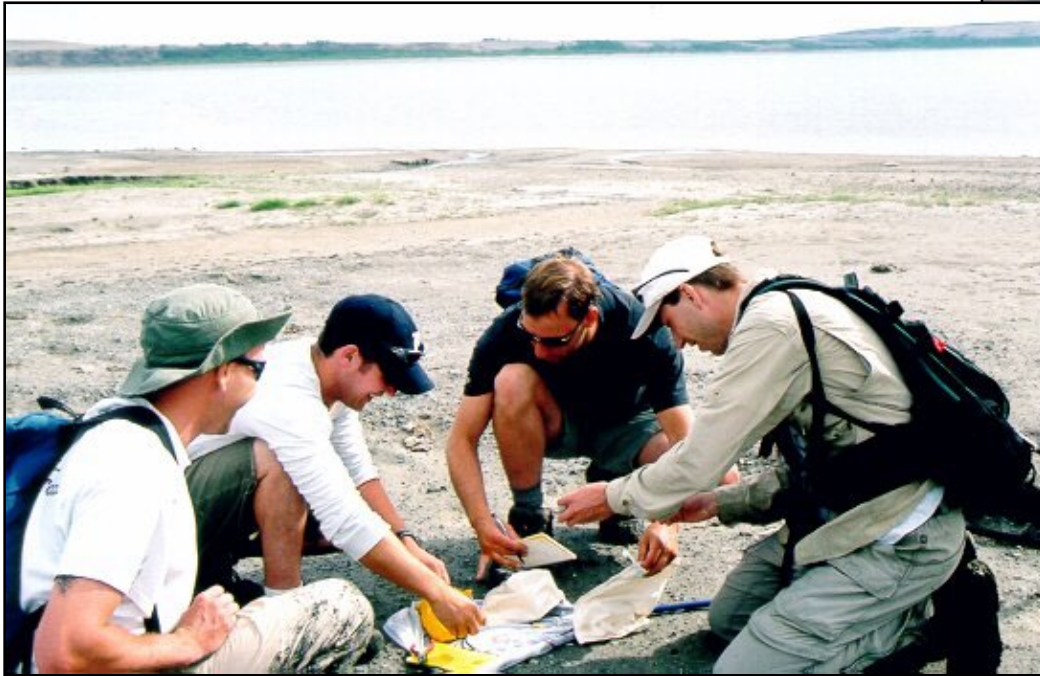


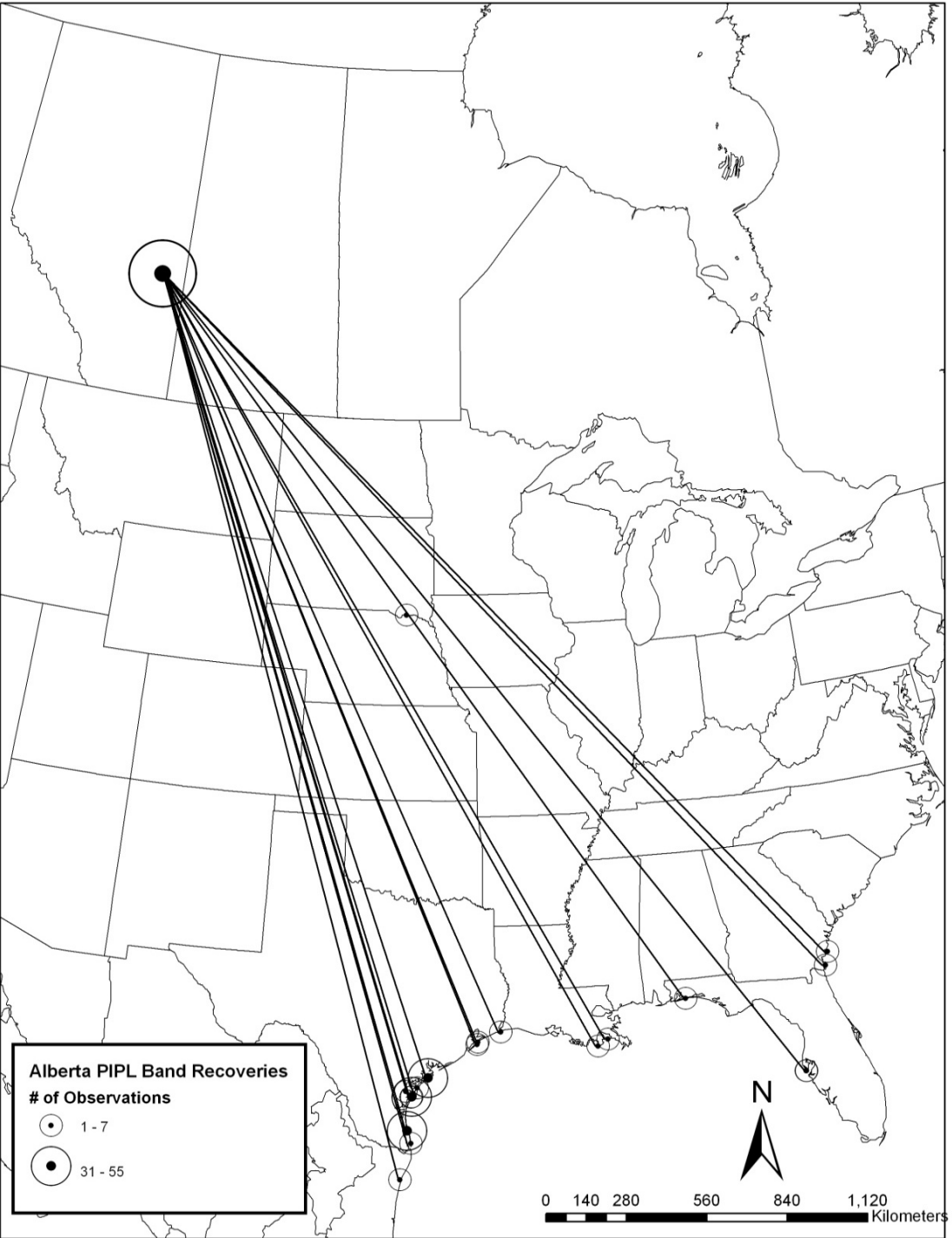
# Recovery Actions - Fledging Results



# Recovery Actions

## - Banding





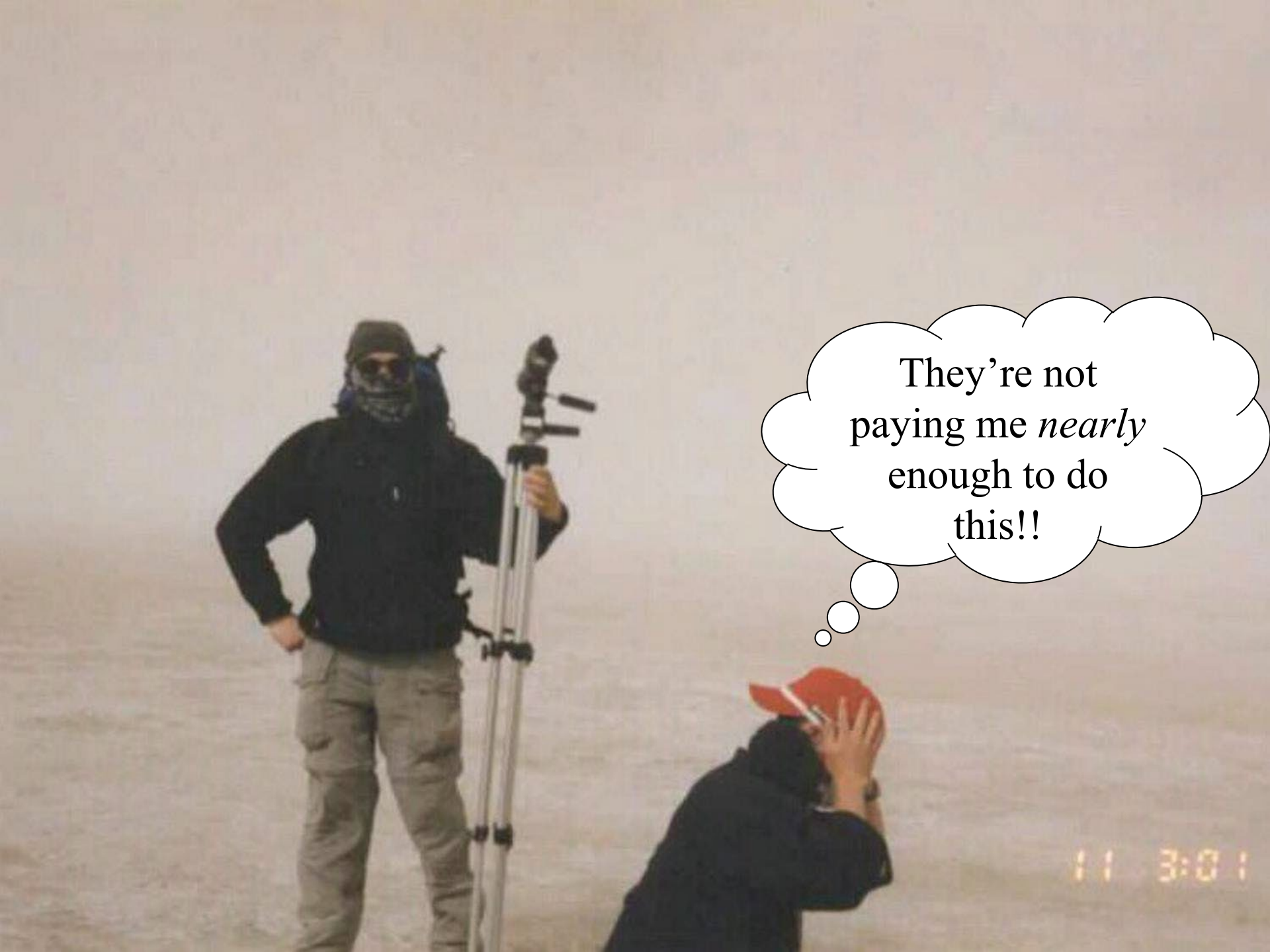
# Recovery Actions - Population Monitoring

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I can't believe  
I'm getting *paid*  
to do this!





They're not  
paying me *nearly*  
enough to do  
this!!

11 3:01









# Acknowledgments



**The End!**

