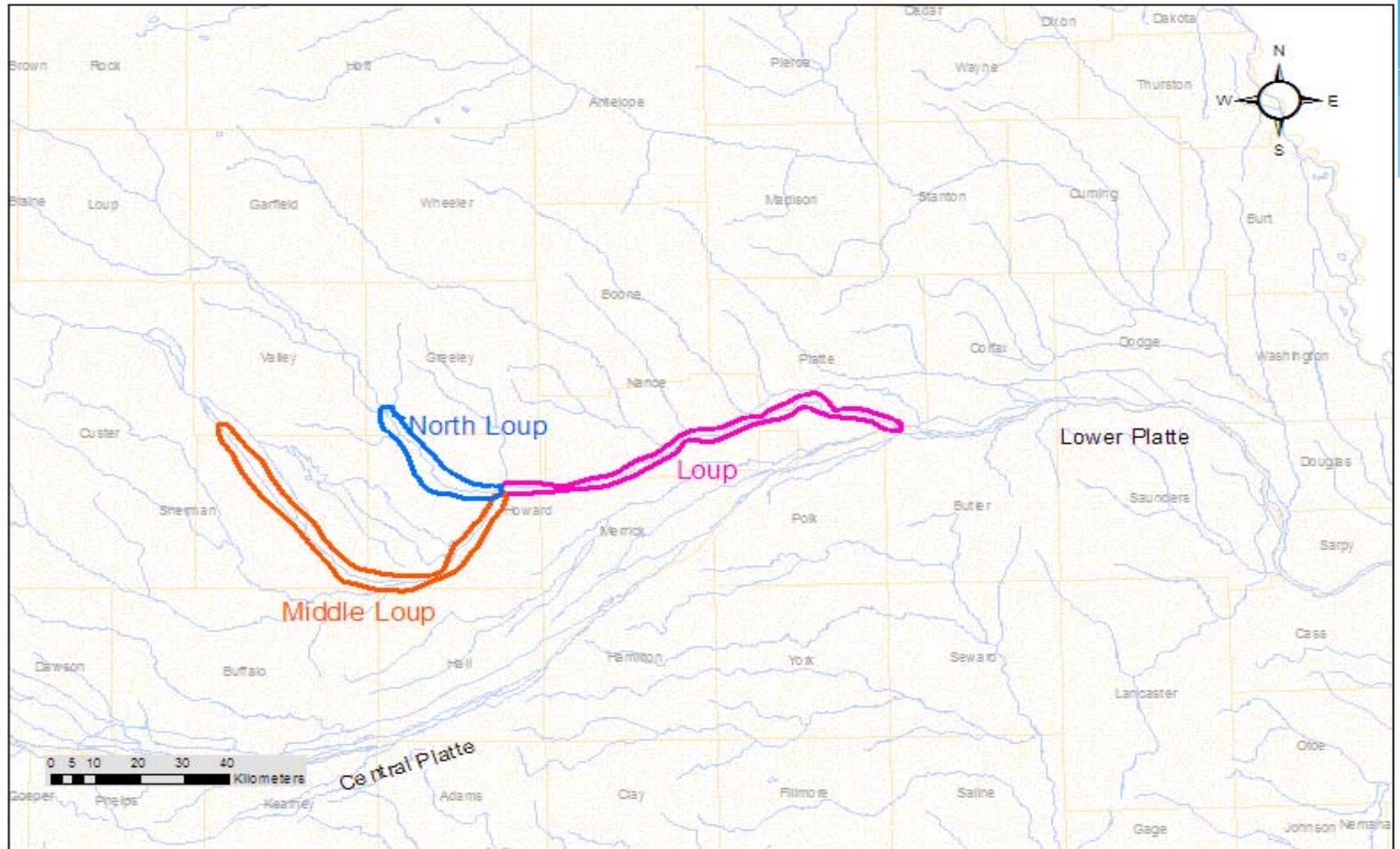


Loup River System and Middle Niobrara River- Nebraska

Information compiled by:
Jeanine Lackey
USFWS
Nebraska Field Office
Grand Island, NE



North, Middle and Loup Rivers



Survey Methods

Kayak



Survey Methods

Airboat



Loup River

Measure of Abundance

- Adult and nest numbers
- Inconsistent surveys



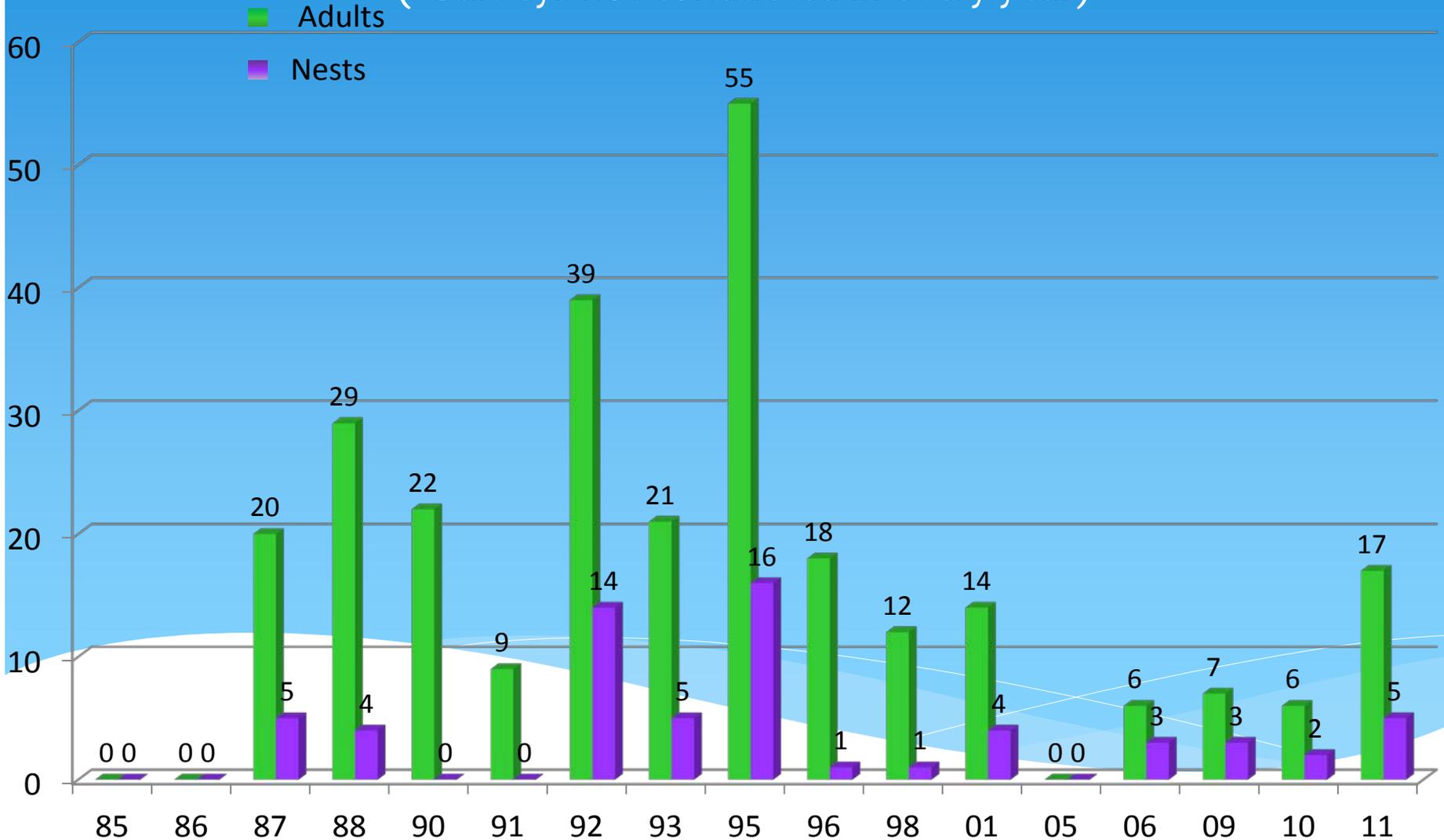
Measure of Productivity

- Nonexistent, zilch, nada, numero zero, nil.

Loup River Sandbars

Number of Piping Plover Adults and Nests by Year*

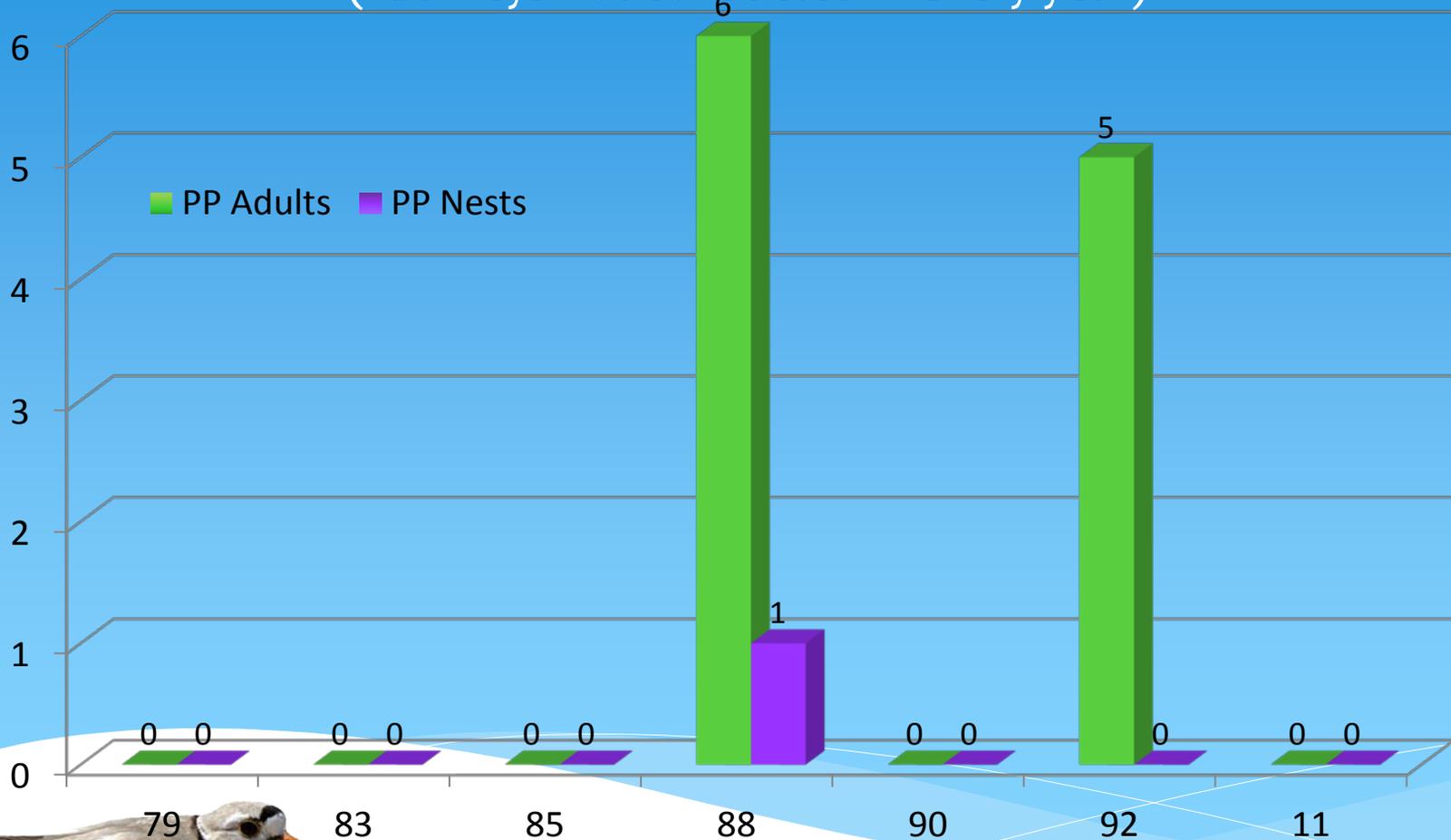
(*Surveys not conducted in every year)



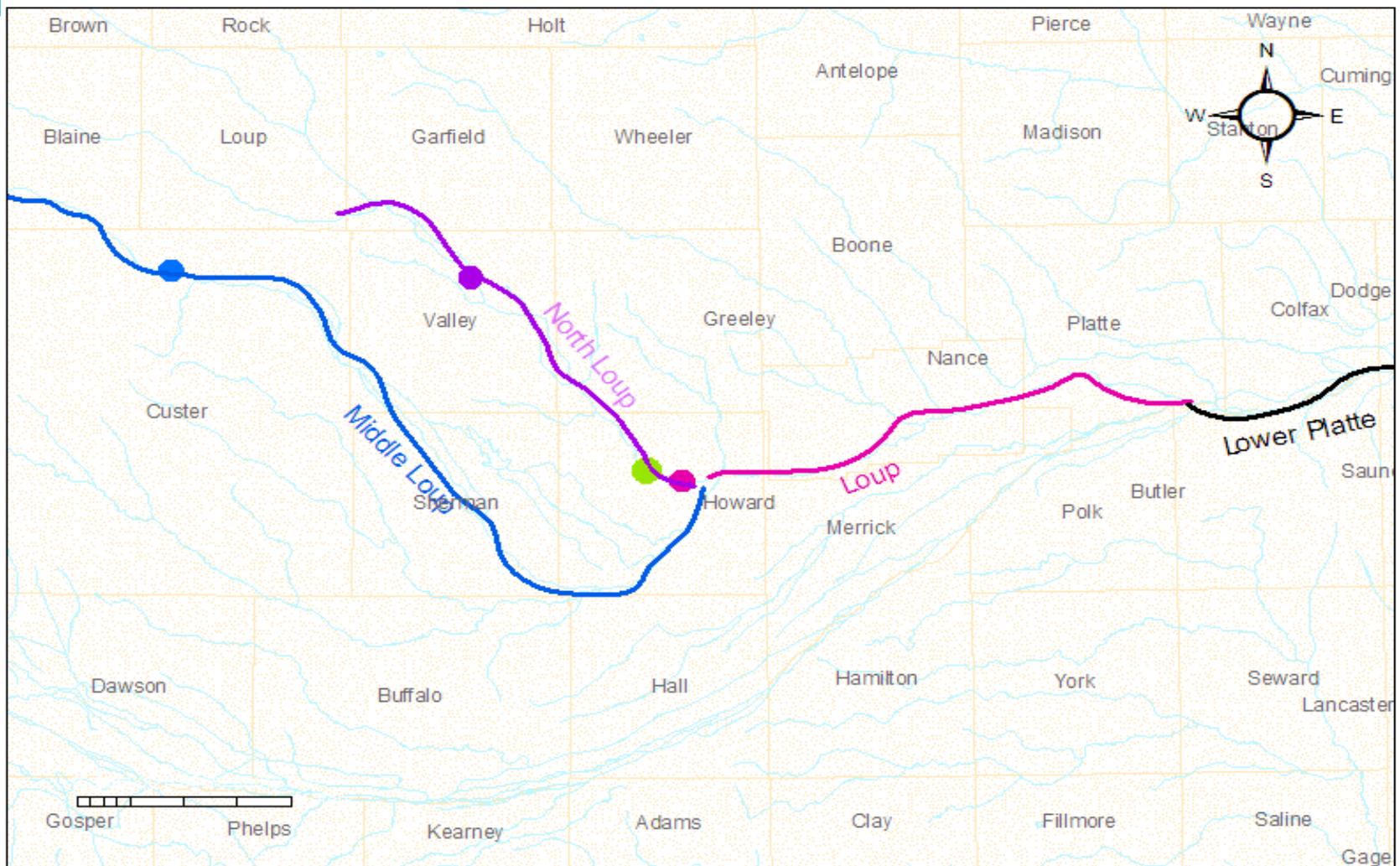
Middle Loup River Sandbars

Number of Piping Plover Adults and Nests by Year*

(*Surveys not conducted in every year)



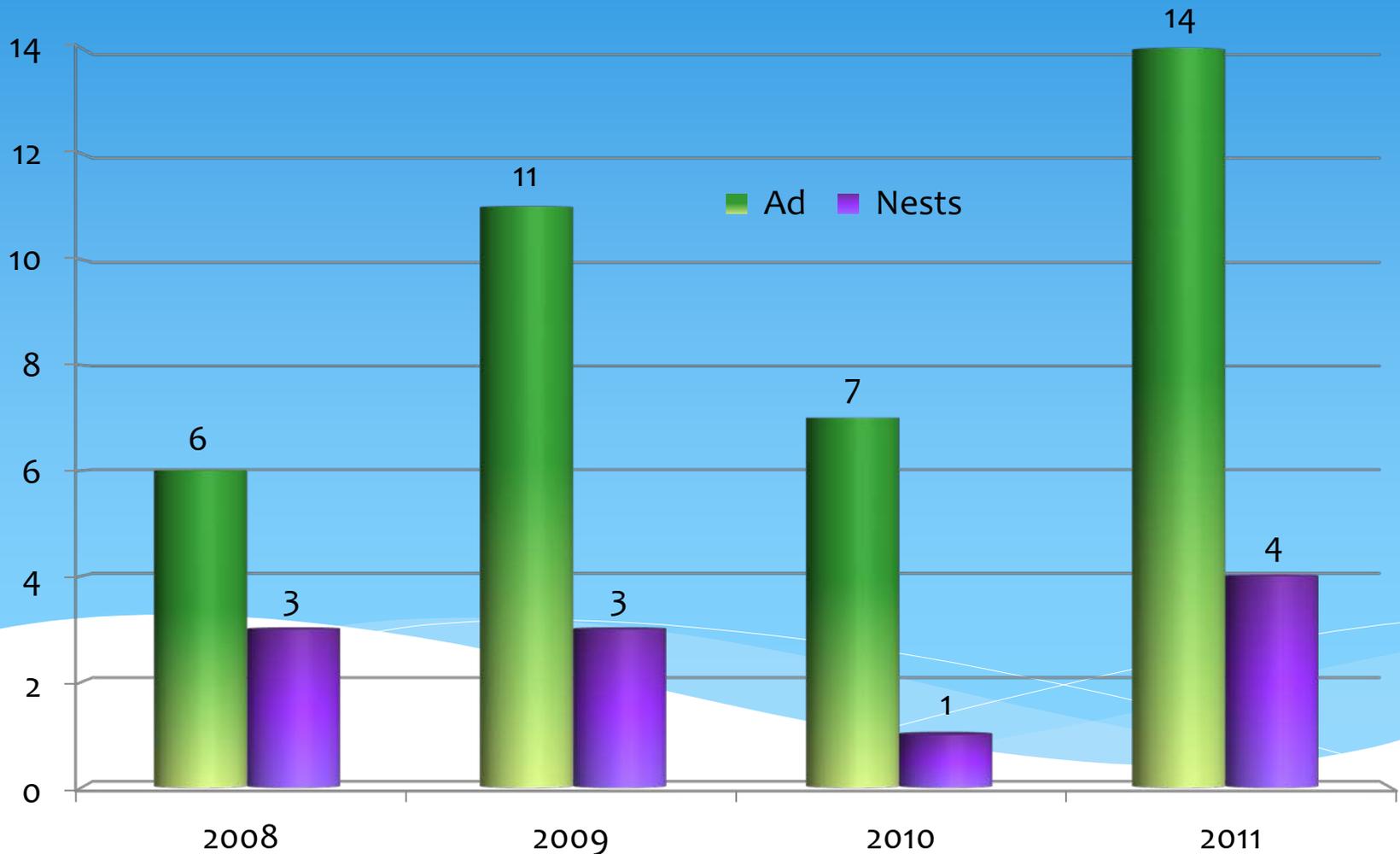
Middle and North Loup Rivers- Sand & Gravel Mine Locations



Loup River System Sandpits, N = 4

Number of Plover Adults and Nests

(Data collected and provided by Ben Wheeler –
Pheasants Forever/Nebraska Game and Parks Commission)



Loup River Habitat Features

- High elevation bars
- Sparse vegetation
- Mid channel (water barrier)
- Open landscape on bank(s)

High, not mid-channel

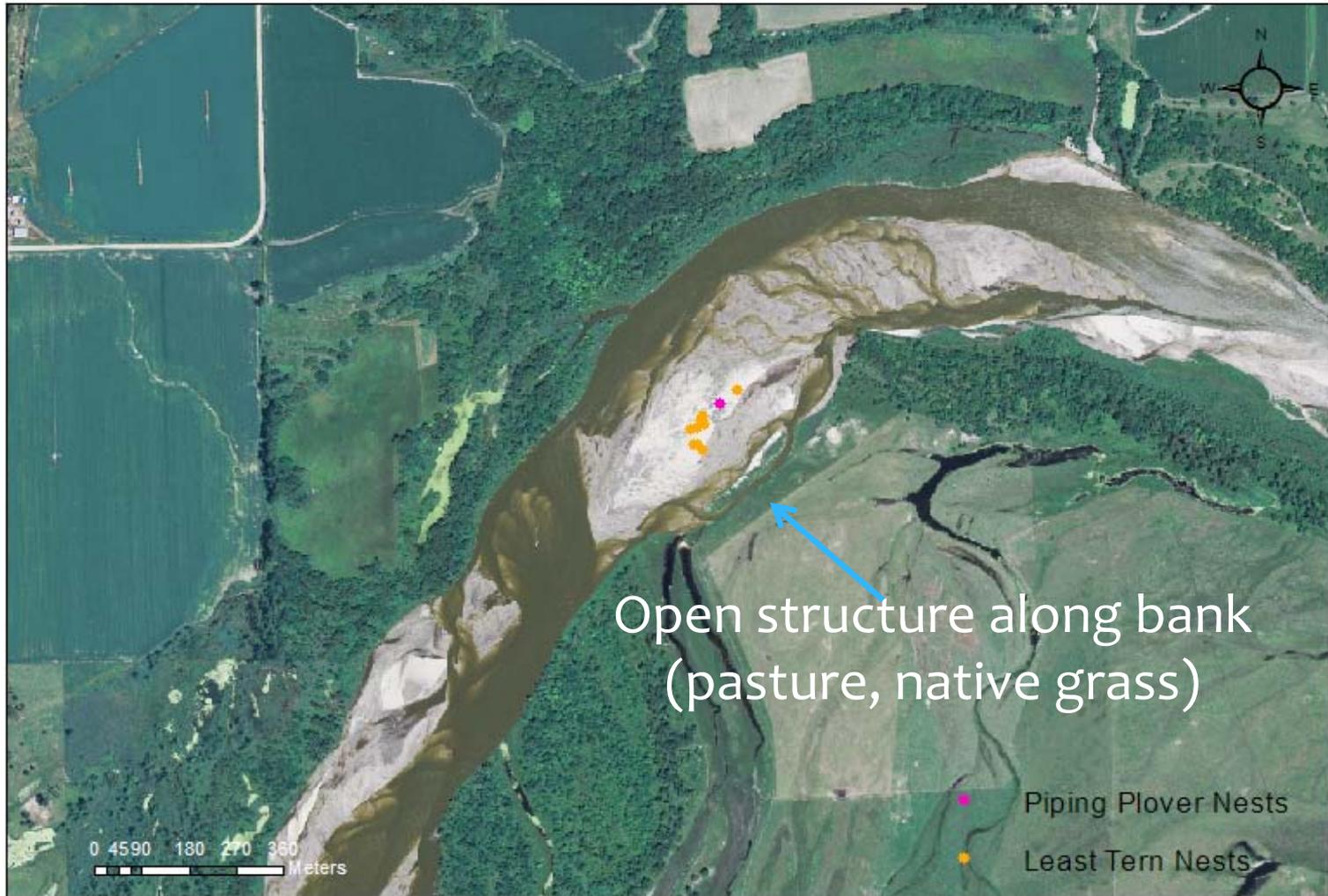


Mid-channel, low elevation

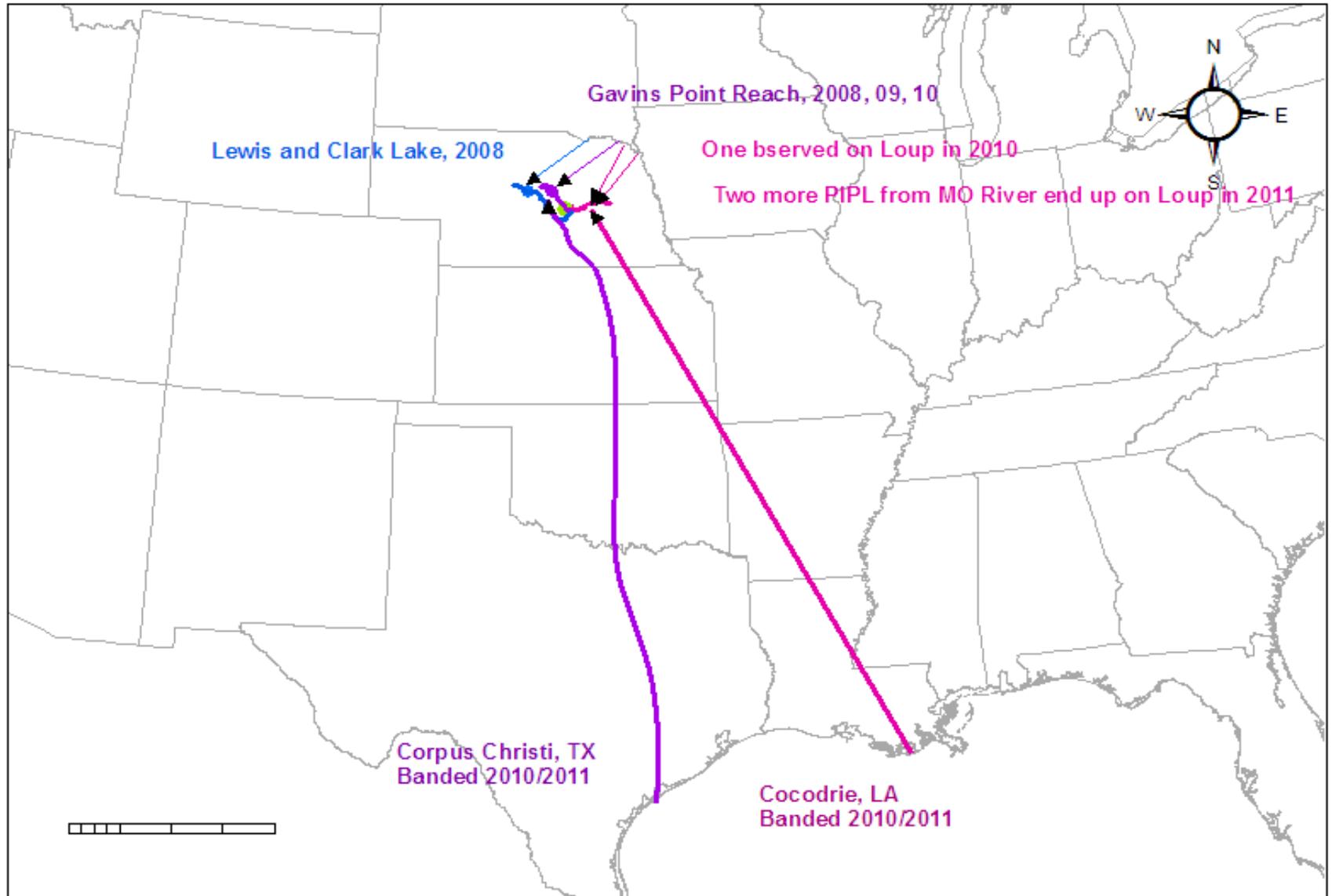


Loup River Colony -2011

Mid-channel, low vegetative structure along bank (s)

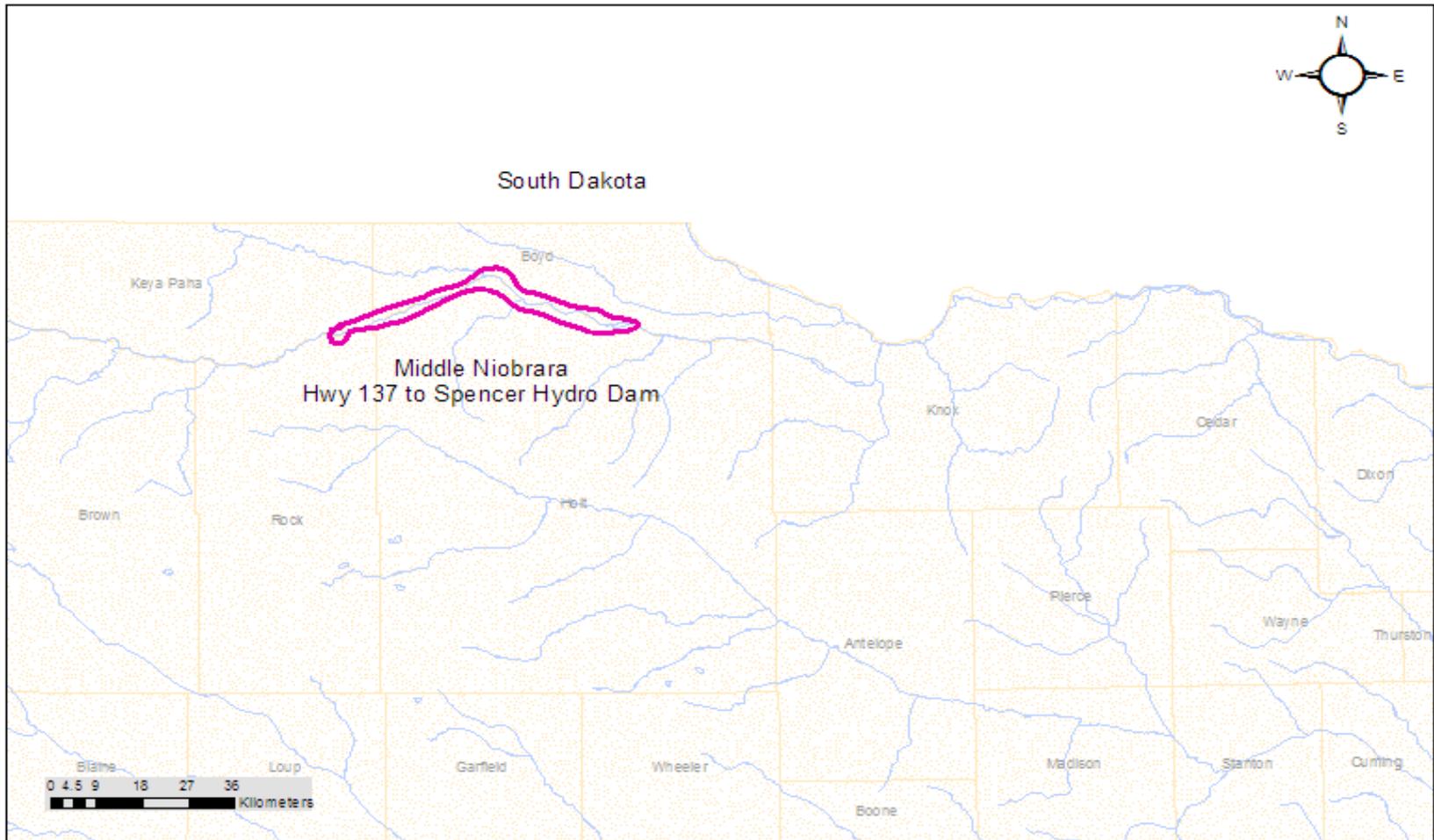


Color Marked Plovers, 2010 -2011



Middle Niobrara River

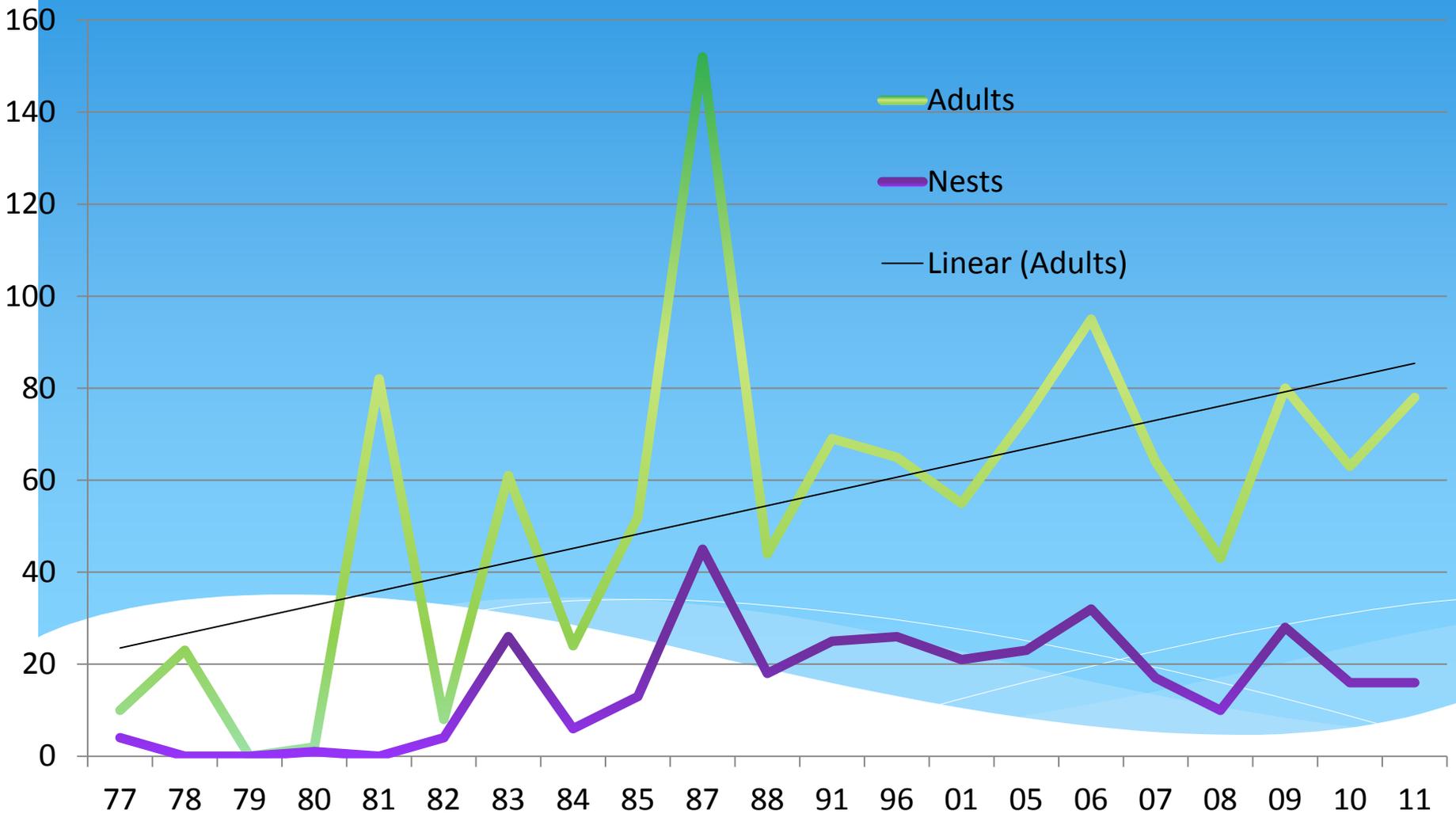
Surveys Conducted by Nebraska Public Power District and
Nebraska Game and Parks Commission)



Middle Niobrara River

Piping Plover Adults and Nests by Year*

(*Data collected and summarized by NPPD, NGPC,... but not in every year)



What's needed:

- Objectives
- Consistent surveys
- Consistent survey techniques
- Staff
- Money



IF we begin a sustained and consistent monitoring program... need guidance from recovery team.