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WCS

WILDLIFE CONSERVATION SOCIETY

RESPONDING TO PACIFIC AMERICAN FLYWAY CONSERVATION PRIORITIES FOR MIGRATORY SHOREBIRDS IN GUATEMALA

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Guatemala's Pacific Coast remains one of the last countries within the Americas lacking information about shorebird abundance and distribution.

Pacific Americas shorebird conservation strategy (Senner, et al. 2016)

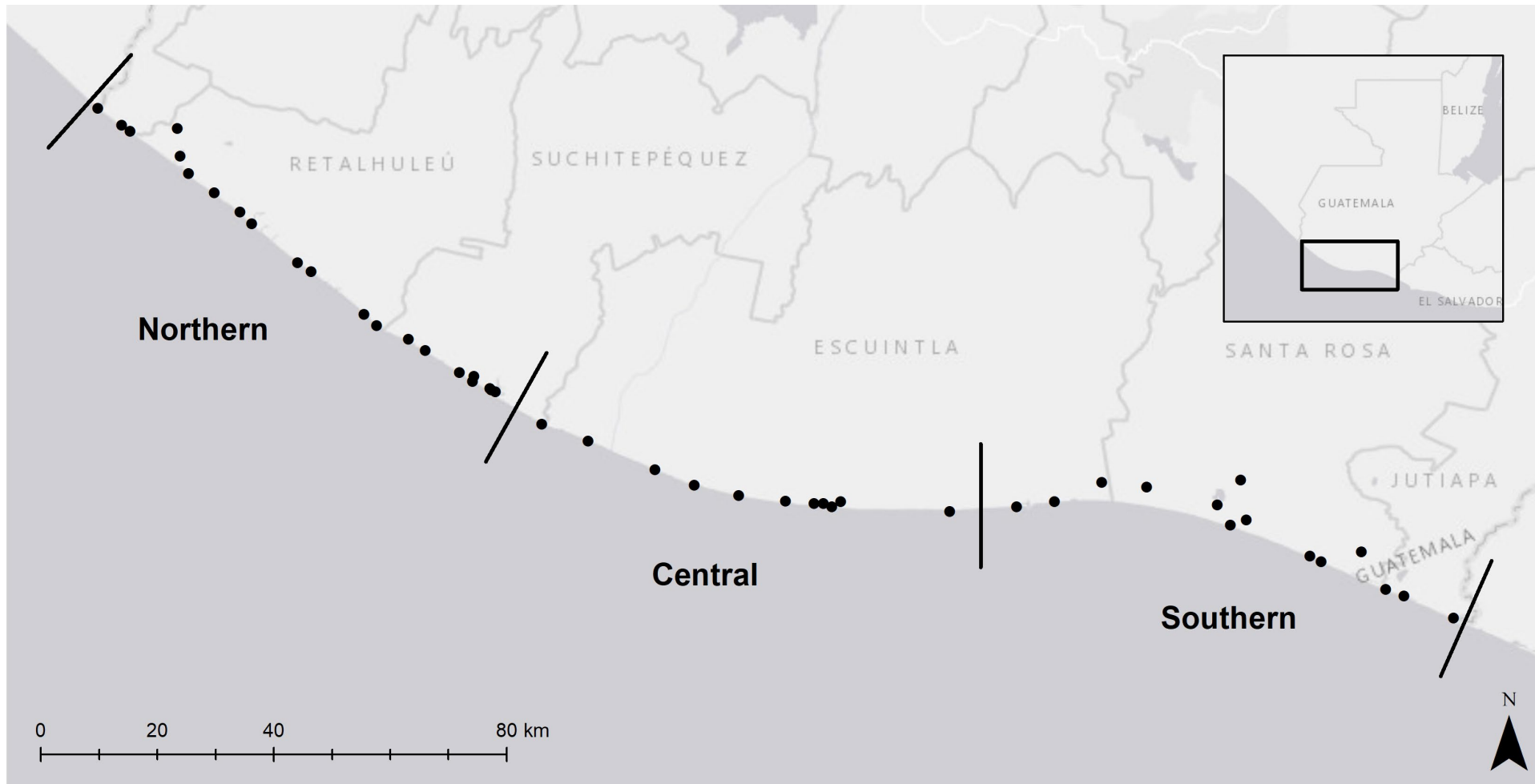
Project objectives

- Fill information gaps
- Identify key migratory and wintering areas
- Identify local and regional threats to shorebirds



Fig 1. Distribution of survey locations as part of the MSP.
Source: MSP Annual Progress Report 2016-2017 (Reiter, et al. 2017)

FIRST SYSTEMATIC COVERAGE ALONG THE PACIFIC COAST OF GUATEMALA



Winter Survey (Jan. – Feb. 2019)

- 46 sites
- 250 km Coastline
- PRISM 2018

- 8 sites were chosen as primary sites and re-surveyed.

Fig 2. Map of study sites during the Winter Survey. Source: WCS Report (Gesmundo, et al. 2019)

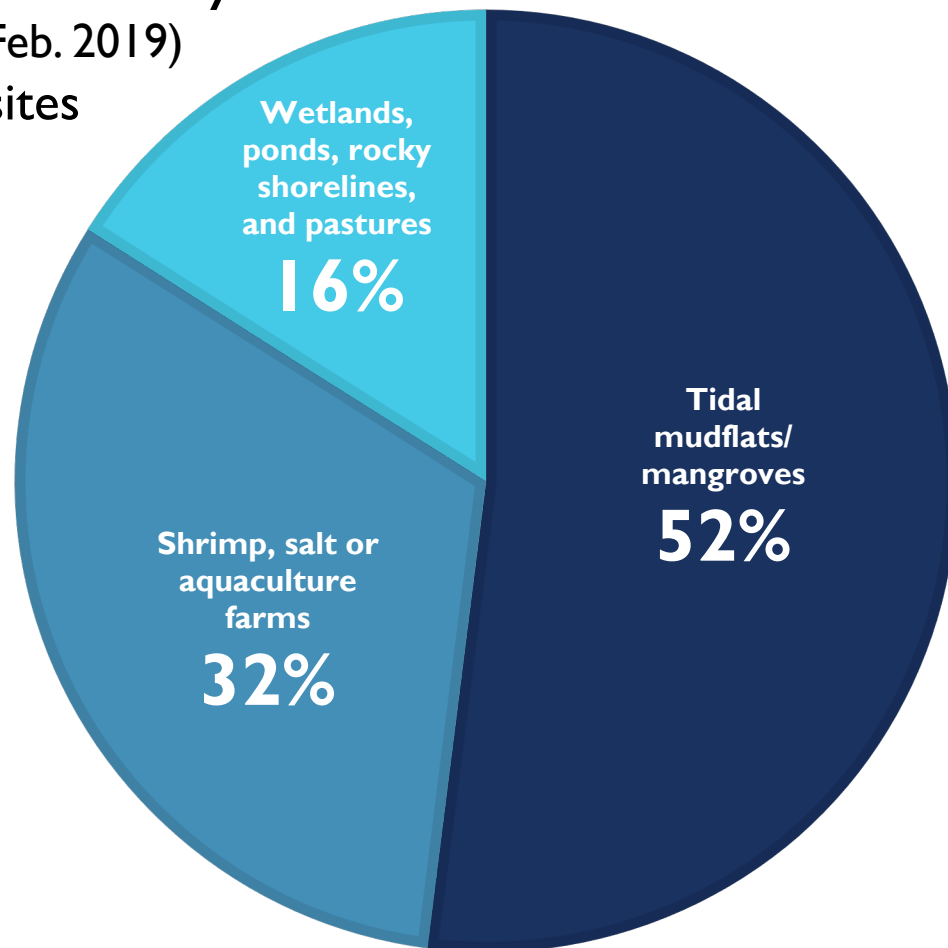
HABITAT TYPES AT SURVEY SITES



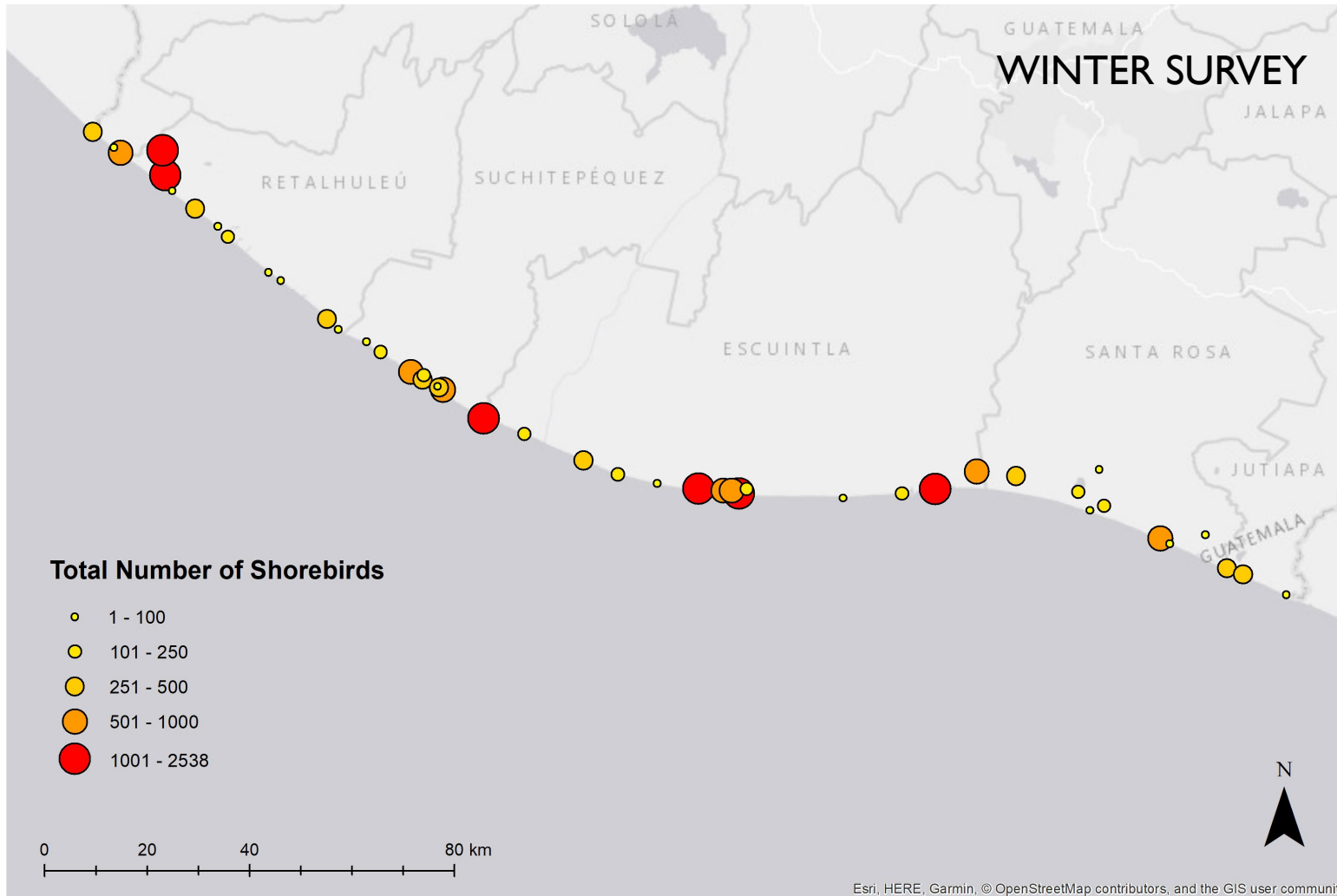
Winter Survey

(Jan. – Feb. 2019)

- 46 sites



SHOREBIRD RICHNESS AND ABUNDANCE



- 30 shorebird species
 - 4 resident species
 - 26 migrant species

- About 20,622 individuals

MOST ABUNDANT SHOREBIRDS DURING THE WINTER SURVEY

- *Calidris* sandpipers made up the largest species group
 - 49.2% of all individuals

20.9%

Western Sandpiper
Calidris mauri



11.2%

Least Sandpiper
Calidris minutilla



10.8%

Semipalmated Plover
Charadrius semipalmatus



9.2%

Semipalmated Sandpiper
Calidris pusilla



MOST FREQUENTLY ENCOUNTERED SHOREBIRDS DURING THE WINTER SURVEY

- % of survey site occurrence

91.3%

Spotted Sandpiper
Actitis macularius



82.6%

Whimbrel
Numenius phaeopus



78.3%

Least Sandpiper
Calidris minutilla



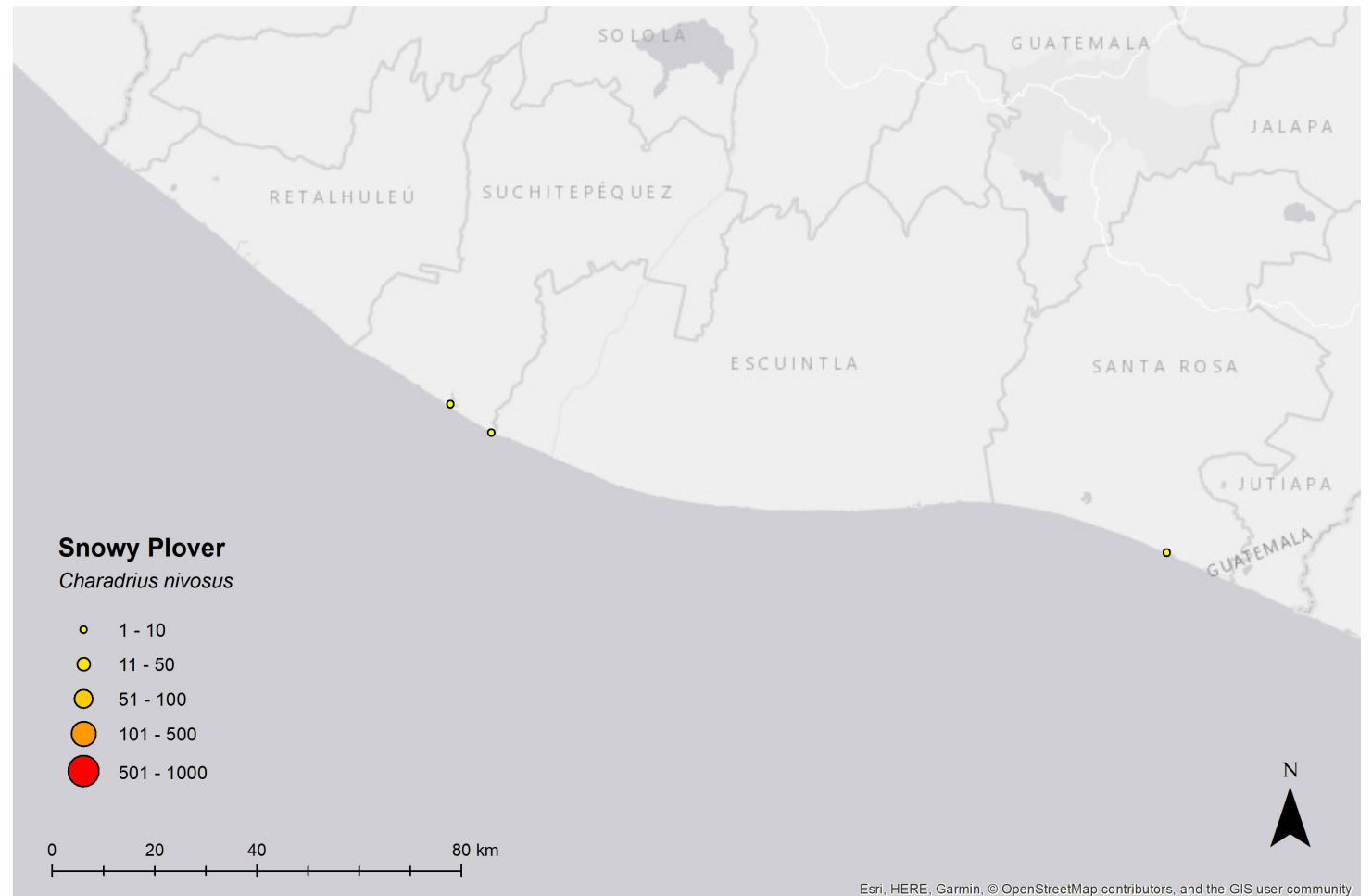
73.9%

Willet
Tringa semipalmata



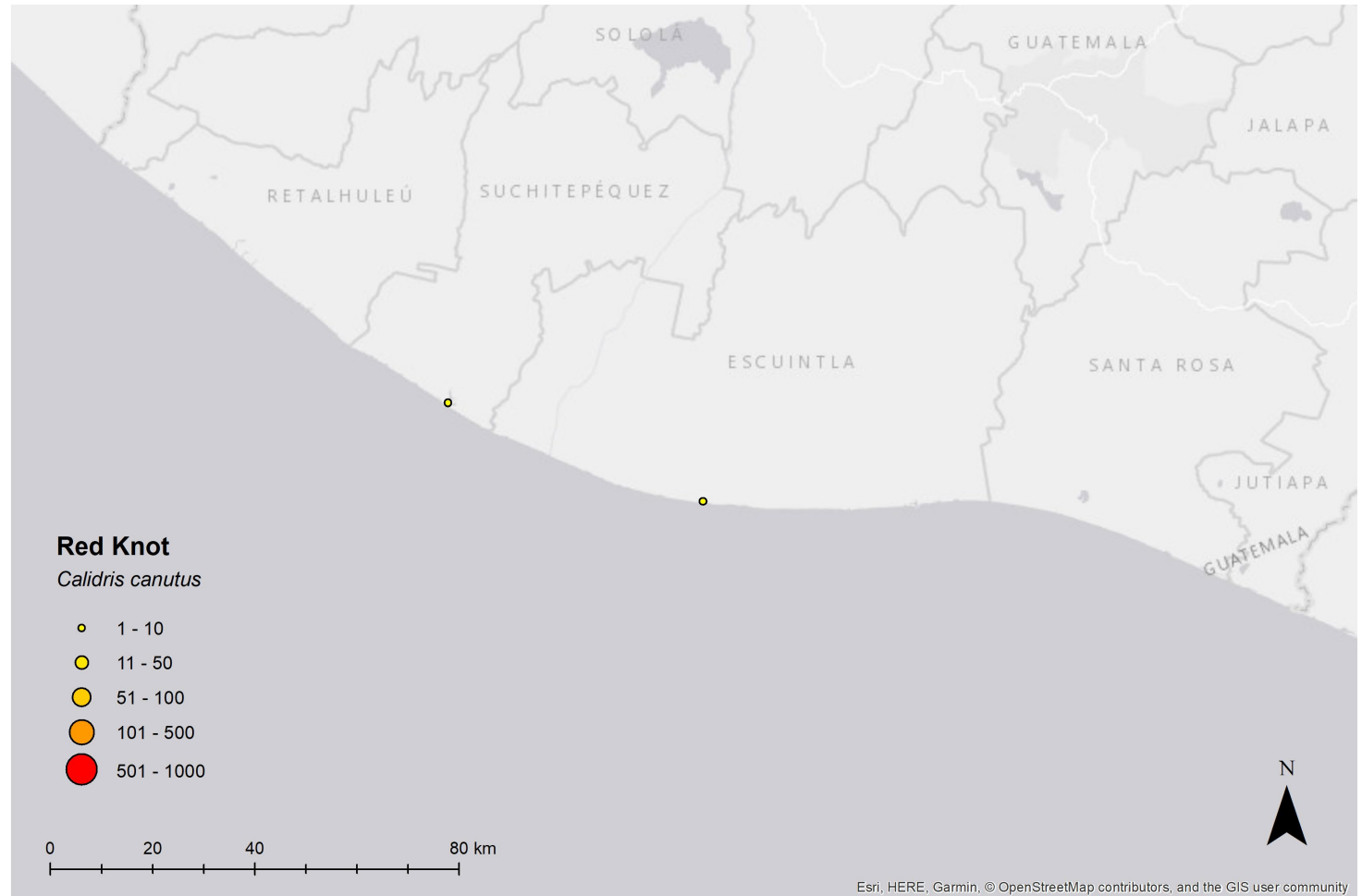
RARE MIGRANT SHOREBIRDS DURING THE WINTER SURVEY

11 Snowy Plover *Charadrius nivosus*



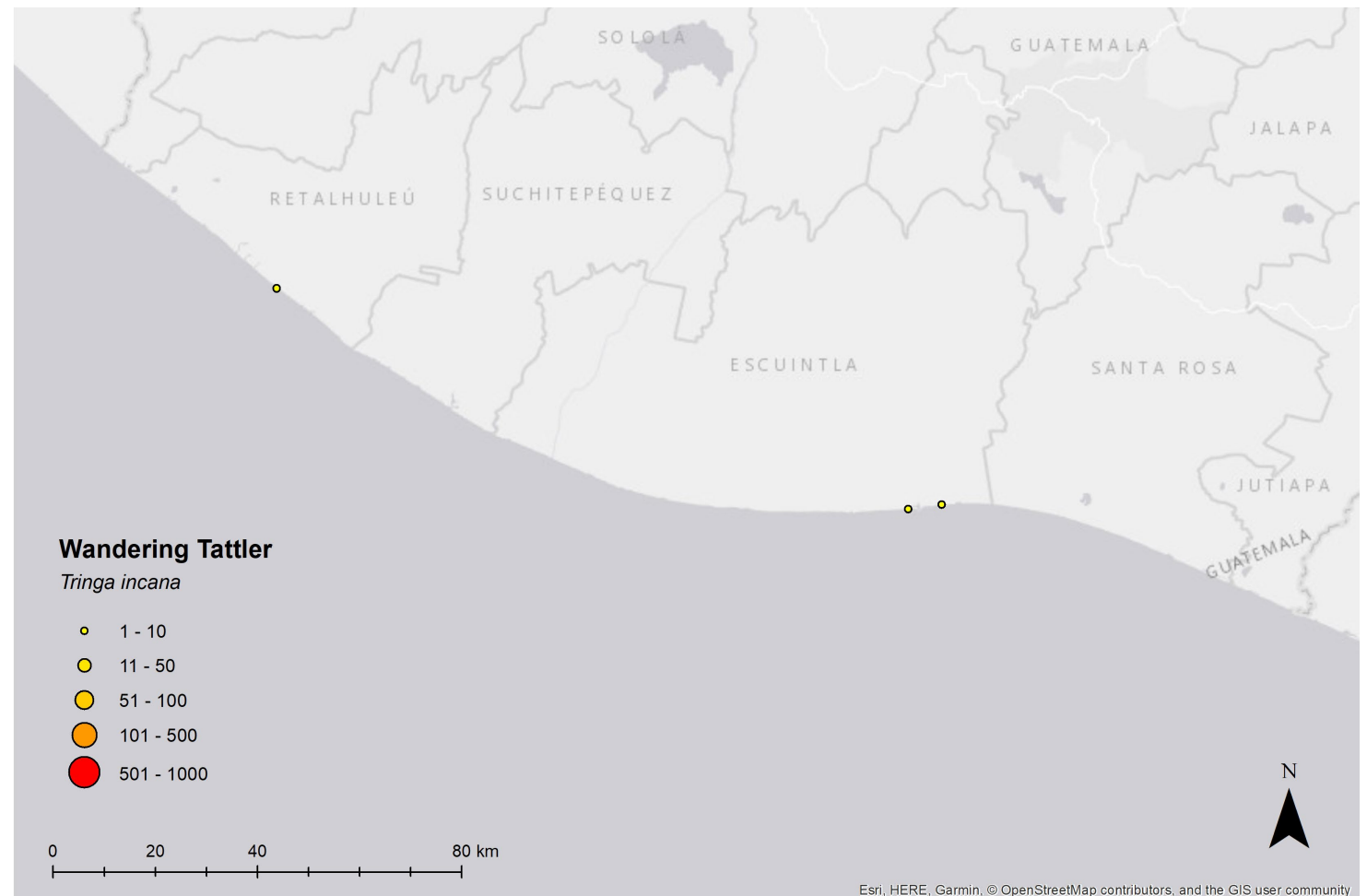
RARE MIGRANT SHOREBIRDS DURING THE WINTER SURVEY

4 Red Knot *Calidris canutus*



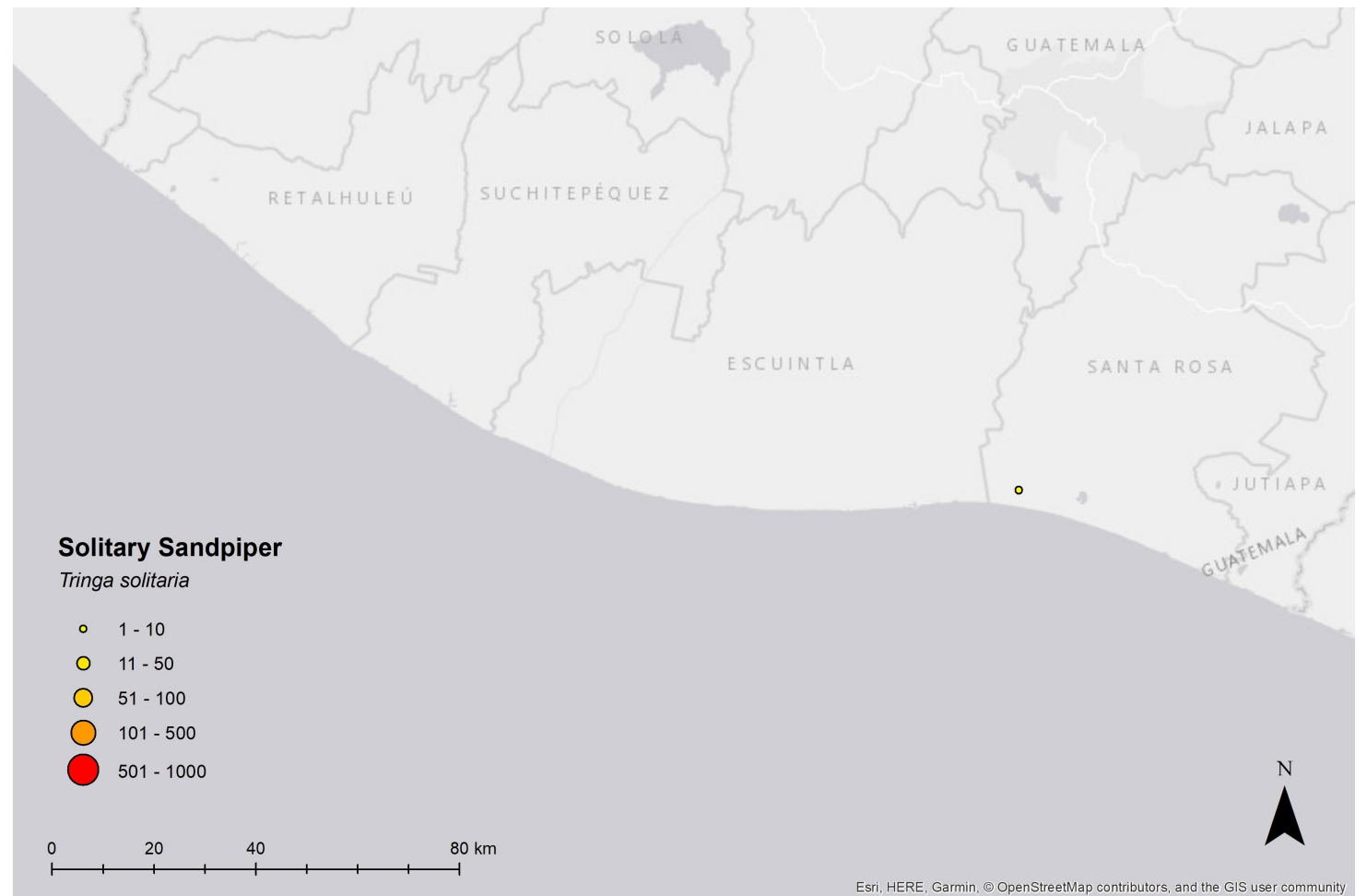
RARE MIGRANT SHOREBIRDS DURING THE WINTER SURVEY

3 Wandering Tattler *Tringa incana*



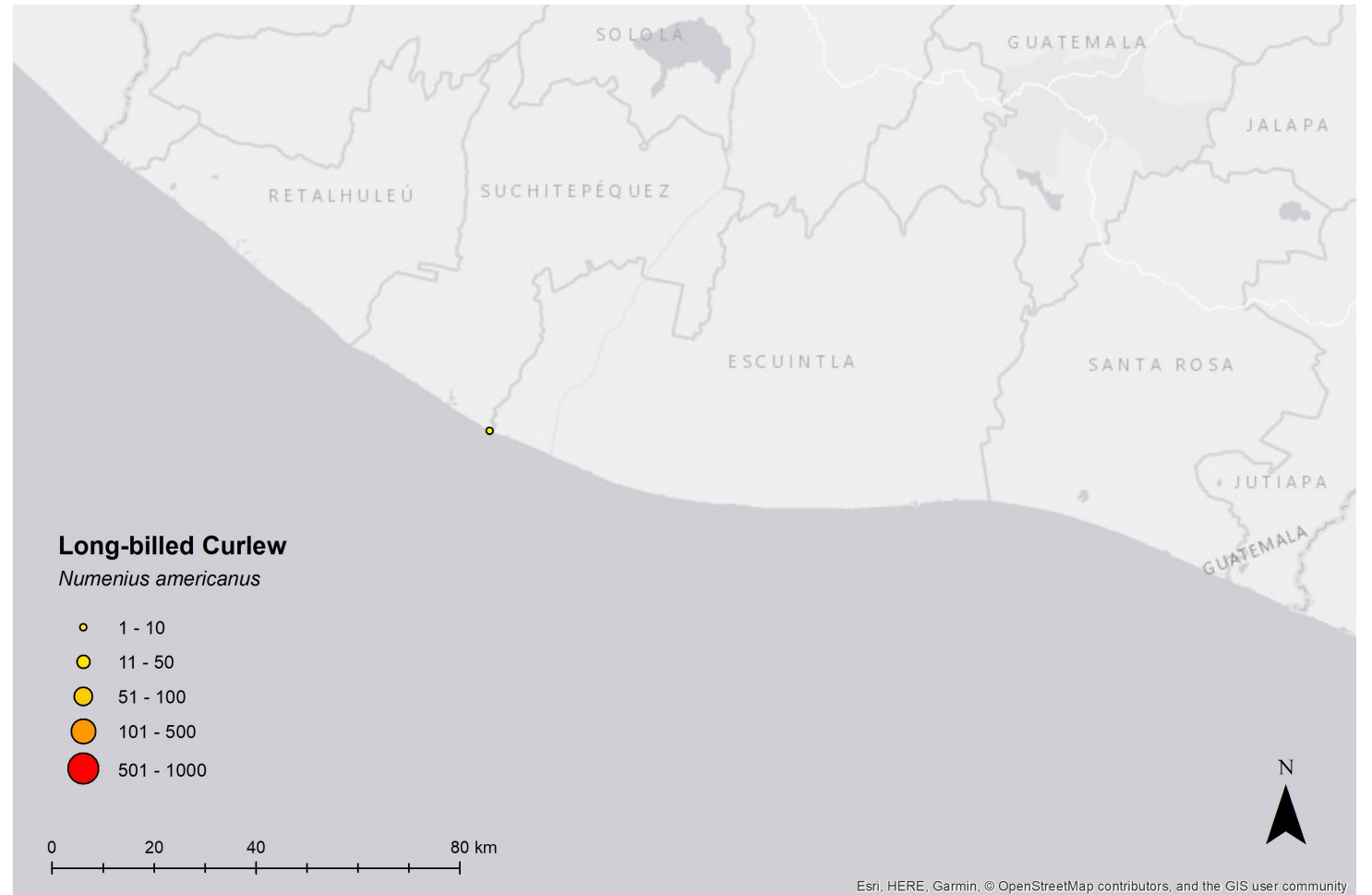
RARE MIGRANT SHOREBIRDS DURING THE WINTER SURVEY

3 Solitary Sandpiper *Tringa solitaria*

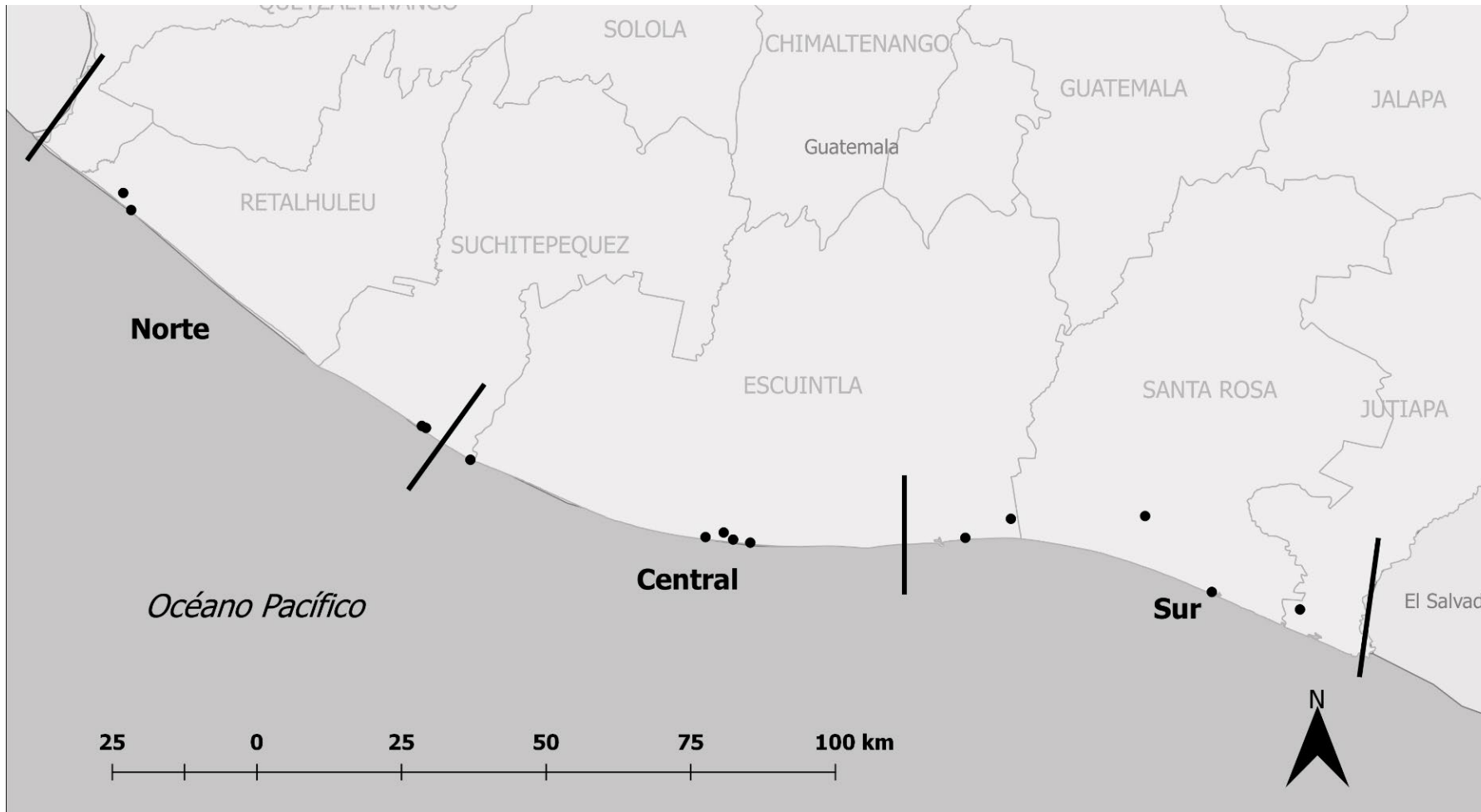


RARE MIGRANT SHOREBIRDS DURING THE WINTER SURVEY

1 Long-billed Curlew *Numenius americanus*



SPRING AND FALL SURVEYS



Spring Survey

(Apr. – May. 2019)

- 14 sites

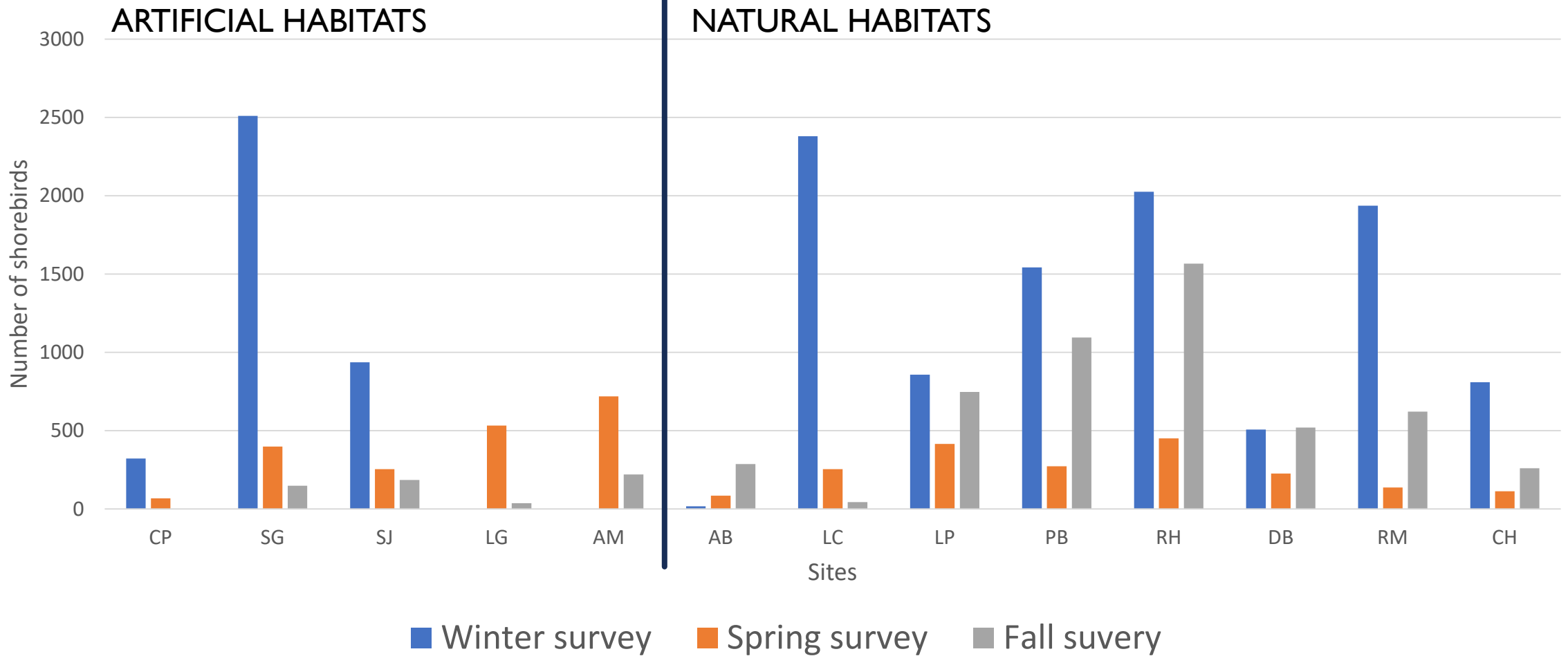
Fall Survey

(Sep. – Oct. 2019)

- 14 sites

Fig 3. Map of study sites during the Spring and Fall Surveys. Source: WCS Report (Sagastume & Bosarreyes. 2019)

SHOREBIRD ABUNDANCE



NEW RECORDS DURING THE SPRING AND FALL SURVEYS



SPRING SURVEY – Long distance migrants

- 31. White-rumped Sandpiper *Calidris fuscicollis*
- 32. Baird's Sandpiper *Calidris bairdii*
- 33. Pectoral Sandpiper *Calidris melanotos*
- 34. Hudsonian Godwit *Limosa haemastica*
- 35. American Golden-Plover *Pluvialis dominica*

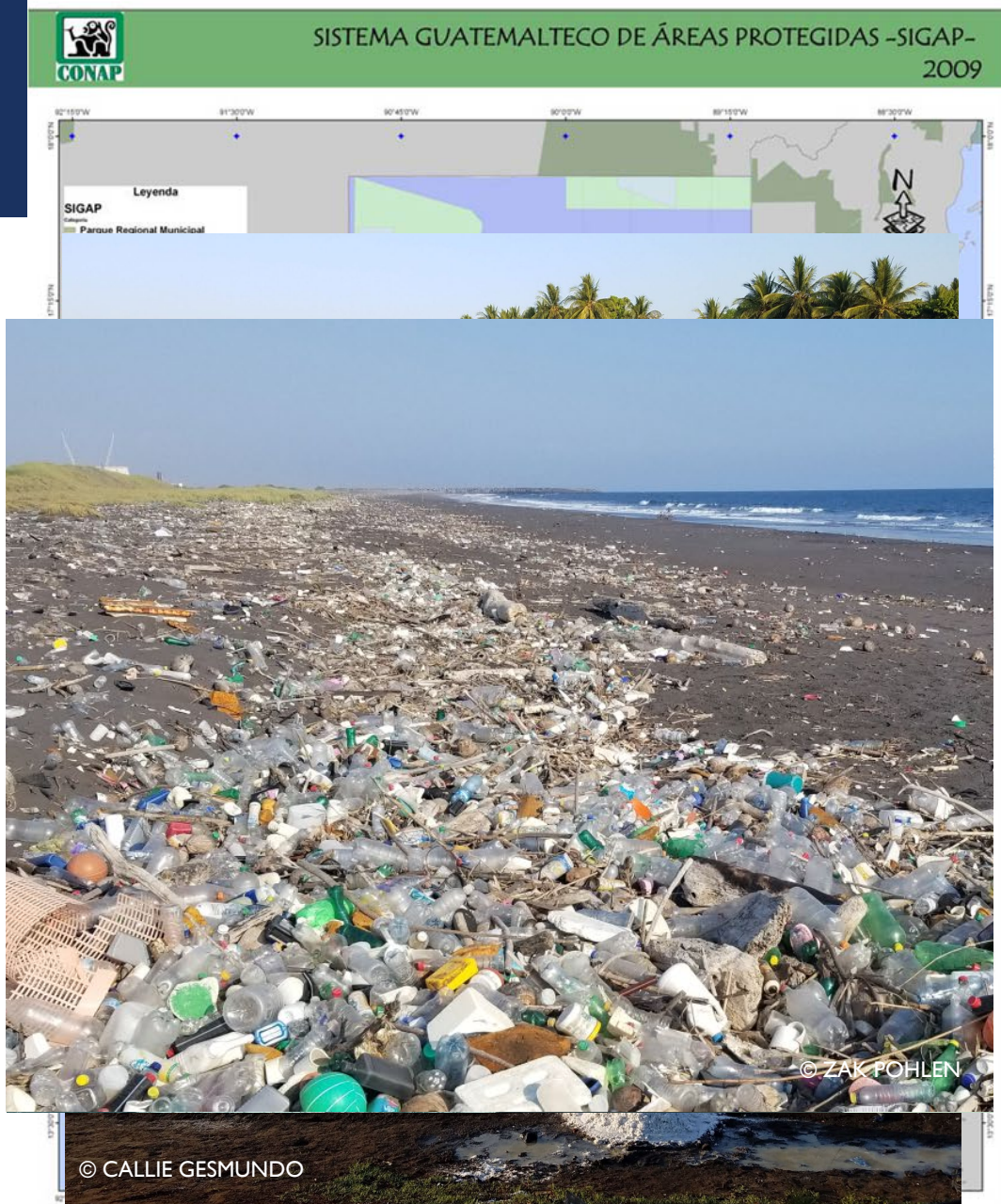
FALL SURVEY

- 36. Buff-breasted Sandpiper *Calidris subruficollis*
- 37. American Oystercatcher *Haematopus palliatus*
- Group of 13 Red Knot *Calidris canutus*
 - Two flagged individuals (Red #114; Green #298)



THREATS AND NEEDS

- Of the 46 survey sites, only 12 (less than 25%) are located within protected areas.
 - Need for coastal protection
- Changes in salt and shrimp farm practices
- Loss of estuaries from water extraction for agriculture.
- Agricultural and plastic pollution





OUTREACH

FUTURE WORK IN GUATEMALA



- Migratory Shorebird Project (MSP) – Monitoring
- Coastal Solutions Fellows Program – Shrimp farm and salt pans practices
- Shorebird ID training workshop





NMBCA



Point Blue
Conservation
Science



THANK YOU!

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