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INVITATION TO BID

Saskatchewan portion of the 2016 International Piping Plover Census

Nature Saskatchewan is co-ordinating the Saskatchewan portion of the 2016 International Piping Plover Breeding Census. We are inviting bids to conduct surveys of Piping Plovers in the areas outlined below. This is the 6th International census; others have occurred in 1991, 1996, 2001, 2006, and 2011. Tentative notification of waterbodies (see areas to be surveyed) to be awarded to candidates will be sent out in March 2016.

Bids submitted will be considered firm, and will form the basis by which we select contractors. The bids will be used in our funding requests which are being submitted to different partners, agencies and industries. We anticipate that most funding will be confirmed in April and May 2016. If full funding is not received, some blocks may be re-negotiated or deleted. Contracts will be finalized in April or May, or as soon after we receive funding notification as is possible.

Please submit proposals to the Saskatchewan Coordinator of the 2016 International Piping Plover Census. If you have any questions, please contact Alan Smith, the Saskatchewan Coordinator at (306) 868-4554. Bids should be emailed to Alan and cc'd to Melissa at: pipingplover@naturesask.ca and mranalli@naturesask.ca, respectively. Bid selection will be based on the lowest qualified bids.

Deadline for Bids:

All bids must be received by **Thursday, March 24 2016**. Proposals should indicate names of personnel, methods, and block(s) of waterbodies being bid on. Resumes (maximum 2 pages) of all personnel should also be included. You may, and are encouraged to, bid on more than 1 block. Your proposal must include a separate bid price for each survey block you wish to cover, as contracts will be awarded individually for each block. Further, your total bid price for each block should demonstrate a breakdown of costs such as salary, travel, food, accommodations, and equipment. Topographic maps (1:50,000) will be supplied, and will remain the property of Nature Saskatchewan subsequent to the completion of the survey.

Project Objectives:

- To conduct a complete count of all of Saskatchewan's adult Piping Plovers in the designated census time period. The 2016 census dates have not yet been confirmed by the U.S. Geological Survey, but are expected to be in the first two weeks of June 2016, as in past censuses. As in past years, the 2016 census will take place during the same time frame across North America.
- To count unpaired adults and breeding pairs within each survey block in order to obtain a total population estimate for Saskatchewan.
- To collect current information on distribution, availability of habitat, water levels and threats, which will be compared to data from the 1991, 1996, 2001, 2006, and 2011 censuses.

Survey Techniques and Report Requirements:

Dates of surveying blocks should follow the time frame set out in the project objectives. Each basin should be thoroughly searched to count the total number of Piping Plovers on that basin. Larger basins will need to be checked entirely for gravelly beaches or other suitable habitat, and all stretches of suitable habitat must be checked for plovers. The entire shore of smaller basins should also be examined. Topographic maps used in the 1991, 1996, 2001, 2006, and 2011 censuses will be reused; in many cases suitable habitat is marked on the maps. However, as water levels may have changed, surveyors need to check the entirety of basins for habitat. Lakes that are dry or partially dry should be checked for any seepage or moist areas, and these areas surveyed.

Surveyors will report all observations of paired and unpaired adults. If a pair is suspected, an effort will be made to find both adults; however, only actual observed individuals will be reported on the census form. Nests will be recorded if noticed, but will not be searched for to minimize surveyor disturbance to breeding sites as much as possible. Because Piping Plovers tend to flock when intruders enter a nesting area, take care to note where birds have flown in from to avoid double-counting.

To ensure disturbance to plovers is minimized, surveyors must restrict their time within any one Piping Plover territory to a maximum of 5 minutes. Surveys must not be conducted under extreme weather conditions like very hot or cold temperatures, during high winds, or rainy days. Census protocol will be distributed to surveyors who are awarded blocks to survey.

Actual surveys will be conducted by foot (or all-terrain vehicles when necessary) on beaches, or by canoeing near suitable beaches.

For each water body, surveyors will mark (on a 1:50,000 topographic map) the locations of (a) all sightings of Piping Plovers, classified as singles, pairs or flocks, and (b) gravel-pebble areas. The number of plovers may also be recorded right on the maps, or sites may be numbered on the map and referenced on a separate sheet. Surveyors are to collect UTM locations of singles, pairs, flocks or nests using GPS units, please ensure you use NAD83 Datum. Individual Census Reports (example from 2011 Census appended; the 2016 form will be similar) are to be submitted with the maps. There may also be a 1-page habitat evaluation form to complete.

Individual Census Reports should be completed in the field as soon as a basin has been surveyed. All reports should be submitted to the Saskatchewan Coordinator of the 2016 International Piping Plover Census at Nature Saskatchewan, by **June 30, 2016**.

Blocks of Waterbodies to Bid On:

Basins to be surveyed by contractors have been grouped into blocks. These include waterbodies with moderate-to-high potential for Piping Plovers, based on results of the 1991, 1996, 2001, 2006, and 2011 censuses. You may submit bids to survey either one or a number of blocks. Proposals to survey partial blocks will not be considered.

Time estimates for surveying some of the basins are included. These are based on experience from past surveys, and are guidelines only; you may propose your own estimate for each site.

Block One: Willow Bunch and Fife lakes (5-6 person-days)

WILLOW BUNCH LAKE. Maps 72H/5,6. In 1991, 31 Piping Plovers were counted, 124 in 1996, 41 in 2001, 105 in 2003, 66 in 2006, and 50 in 2011. Plovers were distributed along both sides of most of the lake. (3 person-days with ATV for parts; 4 person days without)

FIFE LAKE. Map 72H/4,5. In 1991, 29 Piping Plovers were counted, in 1996, normal water levels provided habitat for 53 birds, 7 were counted in 2001, 14 in 2002, 10 in 2003, 27 in 2006, and 26 in 2011. Plovers were located around the lake. (1-2 person-days)

Block Two: Lake of the Rivers, Frederick, and Old Wives lakes (6-7 person-days)

LAKE OF THE RIVERS. Map 72H/12,13. In 1991, 6 Piping Plovers were counted. There were extensive gravel shorelines; and it was estimated that 30% of the shore provided habitat. None were counted in 1996, as water levels were high. There were 7 birds counted in 2001, none in 2003, 23 in 2006, and none in 2011 (again with high water levels). (2 person-days)

FREDRICK LAKE. Map 72I/4. Piping Plovers have been encountered in all of the previous International Piping Plover censuses. In 1991, 12 birds were counted, 22 in 1996, 12 in 2001, 23 in 2003, 21 in 2006, and 25 in 2011. The northeast and southwest sections of the lake are the key locations where habitat is designated as good. (1-2 person days)

OLD WIVES LAKE. Maps 72I/4; 72J/1. In a partial survey conducted in 1984, 39 Piping Plovers were counted and in 1991, 42 were counted, mostly on 72I/4 and closer to the lake. In 1996, the water level was low and 8 birds were counted. In 2001, 5 birds were counted, 1 in 2003, 86 in 2006, and 0 in 2011. Water levels provide variability in available nesting habitat and shorelines to survey. It is highly recommended that this basin be surveyed by 2 observers due to safety concerns involved in the landscape and its remoteness. (3 person-days using ATV)

Block Three: Last Mountain Lake (2-3 person-days)

LAST MOUNTAIN LAKE (excluding the SE arm). Maps 72I/14, 72P/3,6. Areas on the northern section of Last Mountain Lake are designated as Migratory Bird Sanctuary and National Wildlife Area. The W½ 14-27-24-W2 is federally listed as containing shoreline that is Critical Habitat for the Piping Plover. In 1984, 43 birds were counted mainly on points north of Rowan's Ravine. In 1991, 9 were counted and all on the east side of the lake, none were encountered in 1996, 17 were counted in 2001, and none in 2006 and 2011 due to high water levels. (2 person-days using a boat; 3 person-days using ATV)

Block Four: Big Quill Lake (8 -16 person-days)

BIG QUILL LAKE. Maps 72P/15,16; 73A/1. This basin is one of the major nesting areas in Saskatchewan for Piping Plovers. Surveys have been conducted almost yearly for the past 30 years. Past International Piping Plover censuses counted 151 in 1991, 435 in 1996 when water levels were low, 105 birds in 2001, 204 in 2006, and 0 in 2011. The birds are generally located along the entire west and east sides, with fewer along the north tip and along the south side. Depending on water levels, there can be extremely wide stretches of shoreline to search and nesting beaches may be several km's from the water's edge. Estimated person-days are expected to be at the lower end of the range due to recent extremely high water levels, and expected high water levels in 2016. (8-16 person-days)

Block Five: Kutawagan Lake Complex (2-3 person-days)

KUTAWAGAN LAKE COMPLEX. Map 72P/10. In 1991, 8 Piping Plovers were counted on a survey of the lake and 7 associated unnamed basins. None were counted in 1996 due to high water levels, and none in 2001, 2006, or 2011. Kutawagan Lake and other lakes and small ponds in the area between Kutawagan Lake and Big Quill Lake should be surveyed. (2-3 person-days)

Block Six: Chaplin Lake (8 person-days)

CHAPLIN LAKE: An immense and very important lake to Piping Plovers. Numbers have varied by a factor of 3 depending on water levels: in 1991 it held 113, 205 in 1996, 105 in 2001, 281 in 2006, and a record 359 in 2011. Most birds are on the West and East basins, with few to none on the South Basin and Midtskogen Bay.

Note: 2016 Census Report Form is expected to be very similar to the following 2011 form

2011 INTERNATIONAL PIPING PLOVER BREEDING CENSUS
2011 Census Dates: June 4 – 17
Individual Census Report

Please complete this form as thoroughly as possible for each location surveyed, even if Piping Plovers are not found. Attach a map, **with the habitat surveyed clearly marked in addition to the locations of all plovers**. Also feel free to attach additional comments. These forms should be entered on-line and sent to your State/Provincial Coordinator by **June 30, 2011**. For further information, contact your State/Provincial Coordinator or Elise Elliott-Smith, USGS Forest and Rangeland Ecosystem Science Center, 3200 SW Jefferson Way, Corvallis, OR 97331 USA; 541-750-7390; eelliott-smith@usgs.gov

1. Total # of adult Piping Plovers seen: _____ (please classify birds as single or paired below)

Pairs _____

Pair criteria used (check all that apply):

Courtship behavior ___ Pair at nest ___ Birds located together ___

Joint defensive behavior ___ Pair with young ___ Other (describe) _____

of single adults seen: _____

with nest/young: ___ # engaged in territorial display (but no nest/young): ___ # non-territorial _____

2. If reproductive monitoring occurs at this site:

Total # of active nests: _____ Total # of active nests recorded on the previous visit: _____

3. Census Location:

Local name of site (exactly as on your basin list): _____

County/RM: _____ State/Province: _____

Latitude: __ deg __ min __ sec Longitude: ___ deg __ min __ sec (approx. center of site;

NAD83)

or Lat: _____ Long: _____ (decimal degrees)

River Miles (Missouri, Niobrara, and Platte Rivers only): _____

Ownership (check all that apply): Federal ___ State/Provincial ___ Municipal ___ Private

4. Date of census: _____

5. Time census conducted: _____ to _____ Did you take a break or was there an interruption (y/n)? _____
Length of break: _____

6. Will this site be included in the detectability study (y/n)? _____ This is the first/second/additional visit (circle one)

7. Conditions:

Tide stage(if applicable): Low ___ Mid ___ High ___ (Rising ___ / Falling ___)

General weather: Sunny ___ Partly cloudy ___ Overcast ___ Rain ___ Fog ___ Other ___

Approximate temperature: ___ Celsius/Fahrenheit (circle one)

Wind speed: ___ km/hr miles/hr (circle one) Wind direction: _____

8. Habitat censused (check as many as apply, **see green coloured Habitat Definition sheet**):

Body of Water: **I.** Ocean ___ **II.** Protected bay, harbor, cove, lagoon, sound ___ **III.** River ___
IV. Alkali lake/pond ___ **V.** Natural freshwater lake ___ **VI.** Reservoir ___
VII. Industrial Pond ___ **VIII.** Sandpit ___ **IX.** Other (describe) _____

Shoreline: **A.** Mainland (of coast, lake, river, bay, etc.) ___ **B.** Barrier beach ___ **C.** Barrier Island ___
D. Protected shore ___ **E.** Natural bar/island ___ **F.** Man made bar/island ___
G. Dry lake bed ___ **H.** Agricultural field ___ **I.** Other (describe) _____

9. Mode(s) of transportation: Foot ___ Car/Truck ___ ATV ___ Boat ___ Airboat ___
Other _____

10. Suitable habitat (shoreline) surveyed: _____ km/miles (circle one) Average width of habitat: _____ m/ft.

DRAW A LINE AROUND ALL HABITAT SURVEYED ON MAP PROVIDED

Was census completed for this area? yes ___ no ___ Percent suitable habitat missed? _____
Describe suitable habitat missed? _____

11. Was site censused in 2006? Yes ___ No ___ Was site censused in 2001? Yes ___ No ___
Was site censused in 1996? Yes ___ No ___ Was site censused in 1991? Yes ___ No ___
If "yes," how does coverage differ from earlier surveys? _____

12. Were there any circumstances that may have affected census results (weather conditions, human disturbance, etc.)?

13. Habitat disturbance/modification: **A.** Cattle Trampling ___ **B.** Industry ___ **C.** Dredged material ___
(observed at site during survey) **D.** Vehicle ruts ___ **E.** Housing/building development ___
F. Invasive species (please list/explain) ___ **G.** Other ___

Describe further: _____

14. Band combinations of any marked birds (note colors, flags or bands, etc.; attach separate sheet if necessary)

Lat/Long	Upper Left	Lower Left	Upper Right	Lower Right
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

15. Describe any apparent injuries of banded or unbanded birds. _____

16. Number of people censusing: _____
Censusers names, affiliations, phone numbers, email: (attach additional list if necessary)

17. Please rate experience on 1-5 scale, where a 1 is most experienced/familiar and 5 is least (see guidelines)

Censuser Name	Experience with PIPL	Familiarity with site
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_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

18. Additional information/comments/unusual sightings: _____

19. Enter data on-line and return with map to: Data entered online Y/N __. Date data was entered _____