**Supplementary Material**

Status of the Northern Silvery Grebe *Podiceps juninensis* in the northern Andes: recent changes in distribution, population trends and conservation needs

ESTEBAN A. GUEVARA, TATIANA SANTANDER G. ADRIÁN SORIA and PIERRE-YVES HENRY

**Contents**

Table S1. Summary of historical and current presence / absence data collected for the Northern Silvery Grebe *Podiceps juninensis* at its northern distribution.

Table S1. Summary of historical and current presence / absence data collected for the Northern Silvery Grebe *Podiceps juninensis* at its northern distribution. Rodeococha, Pujín, Pato Japina, and Pisayambo are close together and therefore are given the same map code, the same occurs with Represa Mula-Corral and Chiliquinga lake. 1 Census (c) corresponds to data from the Neotropical Waterbird Census programme (2004–2013) and (v) to independent visits.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Map code** | **Lake** | **Number of censuses/visits1** | **Min-Max** | **Record occasions** | **Species status**  | **Site description** | **IBA number** | **Source** |
| 1 | Otún lake | **NA** | **NA** | 1 | Specimen collected in september 1982 | Department: Risaralda, coordinates: 4º 47' N', 77º 09' W, elevation 3,950 m a.s.l., area: 150 ha  | NA | Angarita and Estela 2002 |
| 2 | La Cocha lake | **NA** | **NA** | 3 | Two specimens colected in february 1950. Last reccord obtained in september 2005  | Department: Nariño, coordinates: 1º 04' 46'' N, 77º 09' W, elevation 2,900 m a.s.l., area: 4000 ha, maximum depth: 75 m  | CO166 | Angarita and Estela 2002, GBIF, P. van Els, eBird 2014 |
| 3 | Cumbal lake | **NA** | **NA** | 1 | Four specimens collected in 1944 | Department: Nariño, coordinates: 0º 49'' N', 77º 49' W, elevation 3,638 m a.s.l., area: 500 ha  | CO070 | Angarita and Estela 2002 |
| 4 | Yahuarcocha lake  | 16c | 0 | 0 | Formerly up to 25 adult individuals, currently extinct | Province: Imbabura, coordinates: 0º22' N, 78º 06' W, elevation 2210 m a.s.l., area 230 ha, maximum depth: 7.9  | NA | Scott and carbonell 1986, NWC |
|
|
| 5 | San Pablo lake | 14c | 0 | 0 | Formerly present, curently extinct | Province:Imbabura, coordinates: 0º13' N, 78º 14' W, elevation 2,660 m a.s.l. area: 500 ha | NA | Scott and Carbonell (1986), NWC |
| **Map code** | **Lake** | **Number of censuses/visits1** | **Min-Max** | **Record occasions** | **Species status**  | **Site description** | **IBA number** | **Source** |
| 6 | Cuicocha lake | 7c | 2-8 | 7 | Up to 44 adult individuals counted in 1976, currently extant small population | Province: Imbabura, coordinates 0°17'9"N, 78°21'17", elevation: 3,100 m. a.s.l., area: c. 700 ha, maximum depth: 148 m | EC037 | Hilsenbeck 1979, NWC |
| 7 | Mogotes lake | 2c | 5-7 | 2 | Extant small population  | Province: Napo, coordinates: 0°16'S 78°08'W, elevation: 3870 | EC049 | Santander et al 2006  |
| 8 | Cayambe-Coca area | NA | 1-20 | 25 | Oldest record february 1992, most recent record october 2014. Extant small population | Province: Napo, coordinates 0°20'33.1"S 78°11'47.0"W, elevation 3800 m, complex of 8-10 high Andean small lakes | EC049 | B. Thomas et al., eBird 2015 database |
| 9 | La Mica lake | 14c | 29-202 | 14 | 50% decrease in population size with damming in 2000. Stable population size since dam construction | Province: Napo, coordinates: 00°32’S 78°12’W, elevation: 3,900 m a.s.l., area: 360 ha glacial lake average depth: 22.5 m.  | EC052 | Y. Celleri in litt, NWC |
|
|
| **Map code** | **Lake** | **Number of censuses/visits1** | **Min-Max** | **Record occasions** | **Species status**  | **Site description** | **IBA number** | **Source** |
| 10 | Yambo lake | 16c,8v | 3 | 1 | No population established, one casual record (14 February 2008) | Province: Cotopaxi, coordinates: 1°05’S 78°35’W, elevation: 2,600 m a.s.l., area: 16 ha, maximum depth: 25 m  | NA | NWC |
| 11 | Chaloacocha lake (Llanganati complex) | 1v | 4-6 | 1 | Extant small population  | Provincia: Tungurahua, coordinates: 0°58' 55"S 78°23'12"W, elevation: 3,900 | EC056 | A. Soria pers. obs. |
| 12 | Rodoecocha lake (Llanganati complex) | 4v | 2-6 | 2 | Extant small population  | Provincia: Tungurahua, coordinates:S 01°06'20"S 78°21'49"W, elevation: 3,634 | EC056 | A. Soria pers. obs. |
| 12 | Pujin lake (Langanati complex) | 1v | 4 | 1 | Probably an extant small population, breeding activity | Provincia: Tungurahua, coordinates: 1°11'13"S 78°24'54"W, elevation: 4,093 | EC056 | A. Soria pers. obs. |
| 12 | Pato Japina lake (Llanganati complex) | 1v | 2-9 | 2 | Probably an extant small population  | Province: Tungurahua, coordinates: 0°05' 56"S 78°21'08"W, elevation: 3,900 | EC056 | A. Soria pers. obs. |
| 12 | Pisayambo lake (Llanganti complex) | 11c | 1-3 | 3 | No population established, occasional records | Provincia: Tungurahua, coordinates: 1°05'S 78°23', elevation: 3,600 | EC056 | Santander et al 2006  |
| **Map code** | **Lake** | **Number of censuses/visits1** | **Min-Max** | **Record occasions** | **Species status**  | **Site description** | **IBA number** | **Source** |
| 13 | Angascocha lake (Llanganti complex) | 1 | 2 | 1 | Probably an extant small population  | Provincia: Tungurahua, coordinates: 1°11'06"S 78°24'54"W, elevation: 4063 | EC056 | A. Soria pers. obs. |
| 14 | Upstream from Mula-Corral dam | 1v | 2 | 1 | Extant small population  | Province: Tungurahua, coordinates: 1°09'57"S 78°48'17"W, elevation: 3984 | NA | Henry 2012 |
| 14 | Chiliquingue lake | 2v | 8 | 2 | Extant small population, breeding activity  | Province: Tungurahua, coordinates: 1°14'21"S 78°58'21"W, elevation: 3927 | NA | Henry 2012 |
| 15 | Carihuairazo area | NA | 1 | 1 | Single record (10 June 2014)  | Province: Tungurahua, coordinates: 1°26'34.3"S 78°44'29.8"W, elevation: 4000 m. | NA | J.B. Gillet, eBird 2015 |
| 16 | Urbina Paramo area | NA | 5 | 1 | Single record (25 March 2014) | Province: Chimborazo, coordinates: 1º30'03''S 78º42'12''W, elevation: 3500 m. Small pond nearby a main road | NA | T. Santander pers. Obs.  |
| 17 | Colta lake | 12c | 0-177 | 12 | Recently colonized site (2000’s), ongoing, rapid population growth, breeding activity | Province: Chimborazo, coordinates: 1°44’S 78°45’W, elevation: 3,420 m a.s.l., area: 240 ha, average depth: 3.5 m.  | EC059 | NWC |
| **Map code** | **Lake** | **Number of censuses/visits1** | **Min-Max** | **Record occasions** | **Species status**  | **Site description** | **IBA number** | **Source** |
| 18 | Atillo lake | NA | 1 | 1 | Single record (12 July 2004) | Province: Chimborazo, Coordinates: 2°11'37.5"S 78°31'11.5"W, elevation 3400 m. | EC061 | C. Cajas, eBird 2015 |
| 19 | Ingapirca area | NA | 1 | 1 | Single record (05 march 2015) | Province: Cañar, Coordinates 2°35'10.1"S 78°53'20.6"W, elevation 3200 m. Small pond on the way to Ingapirca  | NA | H. Mesick et al., eBird 2015  |
| 20 | El Cajas area | NA | 1-2 | 10 | Oldest record in 1992, recent record May 2015. Recorded in small numbers at three lakes | Province: Azuay, Coordinates: 2°49'48.0"S 79°12'35.0"W, elevation 3500 m. | EC063 | J. Erickson et al., eBird 2015  |