

Participación ciudadana



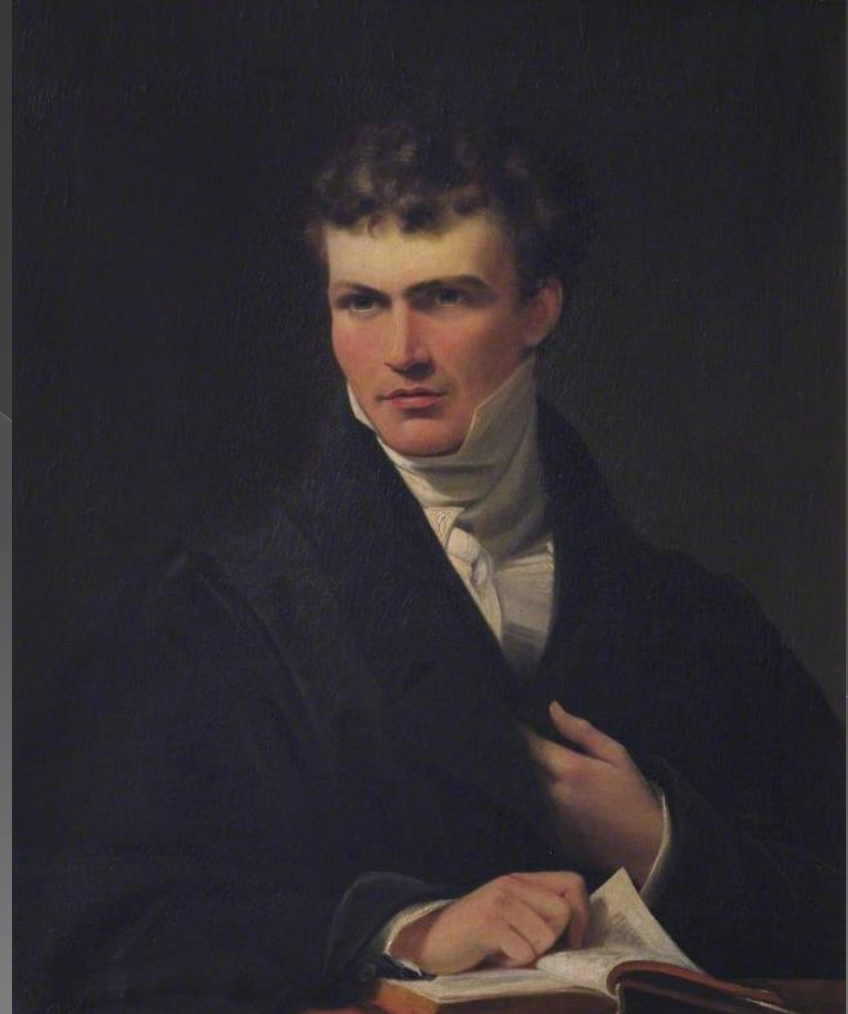
1835

- Miguel Barragán (9° presidente mexicano)
- Great Moon Hoax
- Seis años que se construyó el primer telégrafo
- 41 años antes de la patente del teléfono

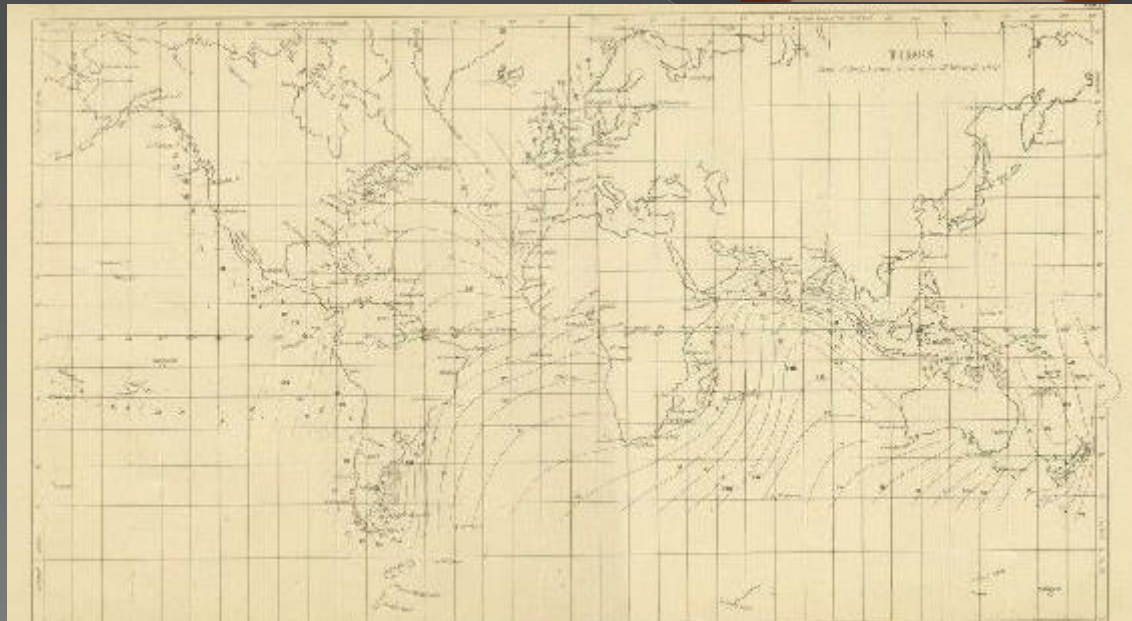


William Whewell

- Gran experimento de las mareas
- 650 estaciones
- Medición de mareas día y noche por dos semanas de junio

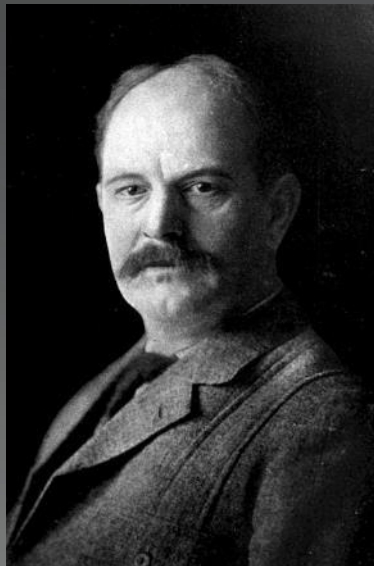


El poder de las multitudes



Audubon's Christmas Bird Count

- A finales del siglo XIX mucha gente celebraba navidad matando la mayor cantidad de aves en un solo día
- En 1900, Frank Chapman propuso que en lugar de matarlas las contaran

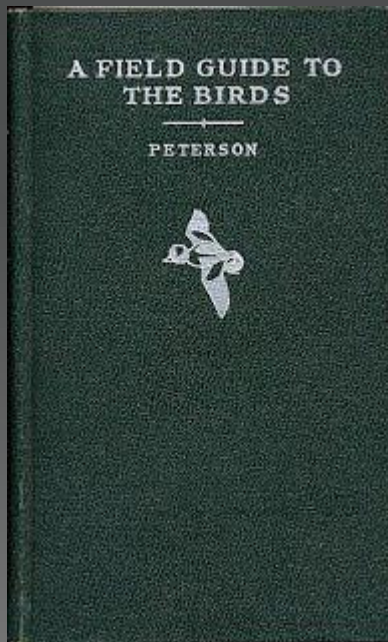


- El 25 de diciembre de ese año, 27 amantes de las aves en 13 estados y dos territorios de Estados Unidos y Canadá encontraron 90 especies y 18,500 individuos
- Big day
- Big year



A Field Guide to the Birds

- En 1934 Roger Tory Peterson revolucionó la observación de aves
- Agrupó las especies similares
- Marcó las características distintivas (field marks)



Sistemas de alerta

- North American Rare Bird Alert (NARBA)
- Alertas de especies raras, casuales y accidentales
- Membresía



Páginas electrónicas

- iNaturalist
- eBird



eBird - aVerAves

- Servicio gratuito
- Almacenamiento de información
- Consulta de registros
- Alertas personalizadas
- Concursos mensuales
- Registros revisados

The screenshot displays the eBird website interface for a user named Gerardo Marrón. The top navigation bar includes links for 'Enviar', 'Explorar', 'Mi eBird', 'Ciencia', 'Acerca de', 'Noticias', and 'Ayuda'. The user's profile is shown on the left, with a photo and the name 'Gerardo Marrón' from 'ATAKAMARA'. A sidebar menu lists options like 'Listas', 'Listas compartidas', 'Localidades', 'Alertas', 'Importaciones de datos', 'Contactos', 'EXPLORAR MI(S)...', 'Perfil', 'Listado de avistamientos', and 'Multimedia'. The main content area is titled 'Mundo' and shows a summary of the user's data: 775 species observed, 2023 complete lists (2830 total), 444 species with photos (1625 observations), 1 species with audio (2 observations), and 864 total marks across 3 countries. Below this, there are two sections: 'mi eBird a través del tiempo' and 'Listas más recientes'. The first section shows a bar chart of species observed per year (2018: 483, 2019: 496, 2020: 414) and a similar chart for October (2018: 59, 2019: 0, 2020: 7). The second section lists recent observations with details like date, time, species count, and location.

Gerardo Marrón
ATAKAMARA

Mundo Cambiar región

775 Especies observadas
2023 Listas completas
2830 total
444 Especies con fotos
1625 Observaciones
1 Especies con audio
2 Observaciones
864 Total de marcas por país
3 países

mi eBird a través del tiempo Especies Listas

Tus especies por año

AÑO	6 OCT. ▾	31 DIC. ▾
2020	414	
2019	496	590
2018	483	508

Mostrar todo

Tus especies para octubre

AÑO	6 OCT. ▾	31 OCT. ▾
2020	7	
2019	0	237
2018	59	208

Listas más recientes

5 Especies	5 oct 2020 18:05	Palo Brea Baja California Sur, Mexico
5 Especies	4 oct 2020 17:53	Palo Brea Baja California Sur, Mexico
3 Especies	3 oct 2020 16:50	Palo Brea Baja California Sur, Mexico
2 Especies	30 sep 2020 16:04	417 Palo Brea, La Paz, Baja California Sur, MX (24.096, 116.808) Baja California Sur, Mexico
27 Especies	29 sep 2020 07:32	San Juan de los Rios, Baja California

Alertas

Alerta de Aves Raras en Baja California Sur

El siguiente reporte muestra observaciones de aves raras en Baja California Sur. Incluye observaciones revisadas/ aprobadas y sin revisar.

Ya estas suscrito

Enviando Alertas **CADA HORA.**
[Cambio](#)

[Eliminar suscripción](#)

Observaciones de los últimos 7 días

[Mostrar detalles](#) [Ordenar por ▼](#)

3 **Pectoral Sandpiper** *Calidris melanotos* **NO CONFIRMADO**

 oct 04, 2020 07:26

 Hotel ME Cabo, , Baja California Sur, Mexico

 Don Hoechlin

[▶ Detalles](#) 

1 **Pectoral Sandpiper** *Calidris melanotos* **NO CONFIRMADO**

 oct 03, 2020 07:20

 Hotel ME Cabo, , Baja California Sur, Mexico

 Don Hoechlin

[▶ Detalles](#) 

1 **Short-eared Owl** *Asio flammeus* **NO CONFIRMADO**

 oct 03, 2020 09:30

 23893, Loreto MX-BCS (25.7980,-111.3438), , Baja California Sur, Mexico

 Sean Sullivan

[▶ Detalles](#) 

1 **Hermit Thrush** *Catharus guttatus* **NO CONFIRMADO**

 sep 30, 2020 08:05

 San Ignacio, B. C. S. , Baja California Sur, Mexico

 Jesus Atondo

[▶ Detalles](#)  

Listado imprimible

Listado de campo de eBird

Ejido El Rosario--Estanque

, Baja California Sur, MX

ebird.org/hotspot/L683041

101 especies (+1 otros taxones) - Todo el año, Todos los años

Fecha: _____

Hora de inicio: _____

Duración: _____

Distancia: _____

Número de observadores: _____

Notas: _____

This checklist is generated with data from eBird (ebird.org), a global database of bird sightings from birders like you. If you enjoy this checklist, please consider contributing your sightings to eBird. It is 100% free to take part, and your observations will help support birders, researchers, and conservationists worldwide.

Go to ebird.org to learn more!

Este listado es generado con los datos de eBird (ebird.org), una base de datos mundial de avistamientos de aves de observadores como tú. Si disfrutas de este listado, por favor considera compartir tus avistamientos en eBird. Es 100% gratis, y tus observaciones ayudarán a los observadores de aves, investigadores y conservacionistas de todo el mundo.

¡Visita ebird.org para saber más!

Waterfowl

- ___ Blue-winged Teal *Spatula discors*
- ___ Cinnamon Teal *Spatula cyanoptera*
- ___ Ring-necked Duck *Aythya collaris*
- ___ Ruddy Duck *Oxyura jamaicensis*

Grouse, Quail, and Allies

- ___ California Quail *Callipepla californica*

Grebes

- ___ Least Grebe *Tachybaptus dominicus*
- ___ Pied-billed Grebe *Podilymbus podiceps*

Pigeons and Doves

- ___ Common Ground Dove *Columbina passerina*
- ___ Ruddy Ground Dove *Columbina talpacoti*
- ___ White-winged Dove *Zenaida asiatica*
- ___ Mourning Dove *Zenaida macroura*

Cuckoos

- ___ Greater Roadrunner *Geococcyx californianus*
- ___ Yellow-billed Cuckoo *Coccyzus americanus*

Hummingbirds

- ___ Costa's Hummingbird *Calypte costae*
- ___ Xantus's Hummingbird *Hylocharis xantusii*

Rails, Gallinules, and Allies

- ___ Common Gallinule *Gallinula galeata*
- ___ American Coot *Fulica americana*

Shorebirds

- ___ Killdeer *Charadrius vociferus*
- ___ Spotted Sandpiper *Actitis macularia*

Gulls, Terns, and Skimmers

- ___ California Gull *Larus californicus*

Cormorants and Anhingas

- ___ Neotropic Cormorant *Phalacrocorax brasilianus*
- ___ Double-crested Cormorant *Phalacrocorax auritus*

Hérons, Ibis, and Allies

- ___ Great Blue Heron *Ardea herodias*
- ___ Great Egret *Ardea alba*
- ___ Snowy Egret *Egretta thula*
- ___ Green Heron *Butorides virescens*
- ___ Black-crowned Night-Heron *Nycticorax nycticorax*

Vultures, Hawks, and Allies

- ___ Turkey Vulture *Cathartes aura*
- ___ Sharp-shinned Hawk *Accipiter striatus*
- ___ Cooper's Hawk *Accipiter cooperii*
- ___ Broad-winged Hawk *Buteo platypterus*
- ___ Zone-tailed Hawk *Buteo albonotatus*
- ___ Red-tailed Hawk *Buteo jamaicensis*

Kingfishers

- ___ Belted Kingfisher *Megasceryle alcyon*

Woodpeckers

- ___ Gila Woodpecker *Melanerpes uropygialis*
- ___ Ladder-backed Woodpecker *Dryobates scalaris*
- ___ Gilded Flicker *Colaptes chrysoides*

Falcons and Caracaras

- ___ Crested Caracara *Caracara cheriway*
- ___ American Kestrel *Falco sparverius*
- ___ Peregrine Falcon *Falco peregrinus*

Tyrant Flycatchers: Pewees, Kingbirds, and Allies

- ___ Gray Flycatcher *Empidonax wrightii*
- ___ Pacific-slope Flycatcher *Empidonax difficilis*
- ___ Black Phoebe *Sayornis nigricans*

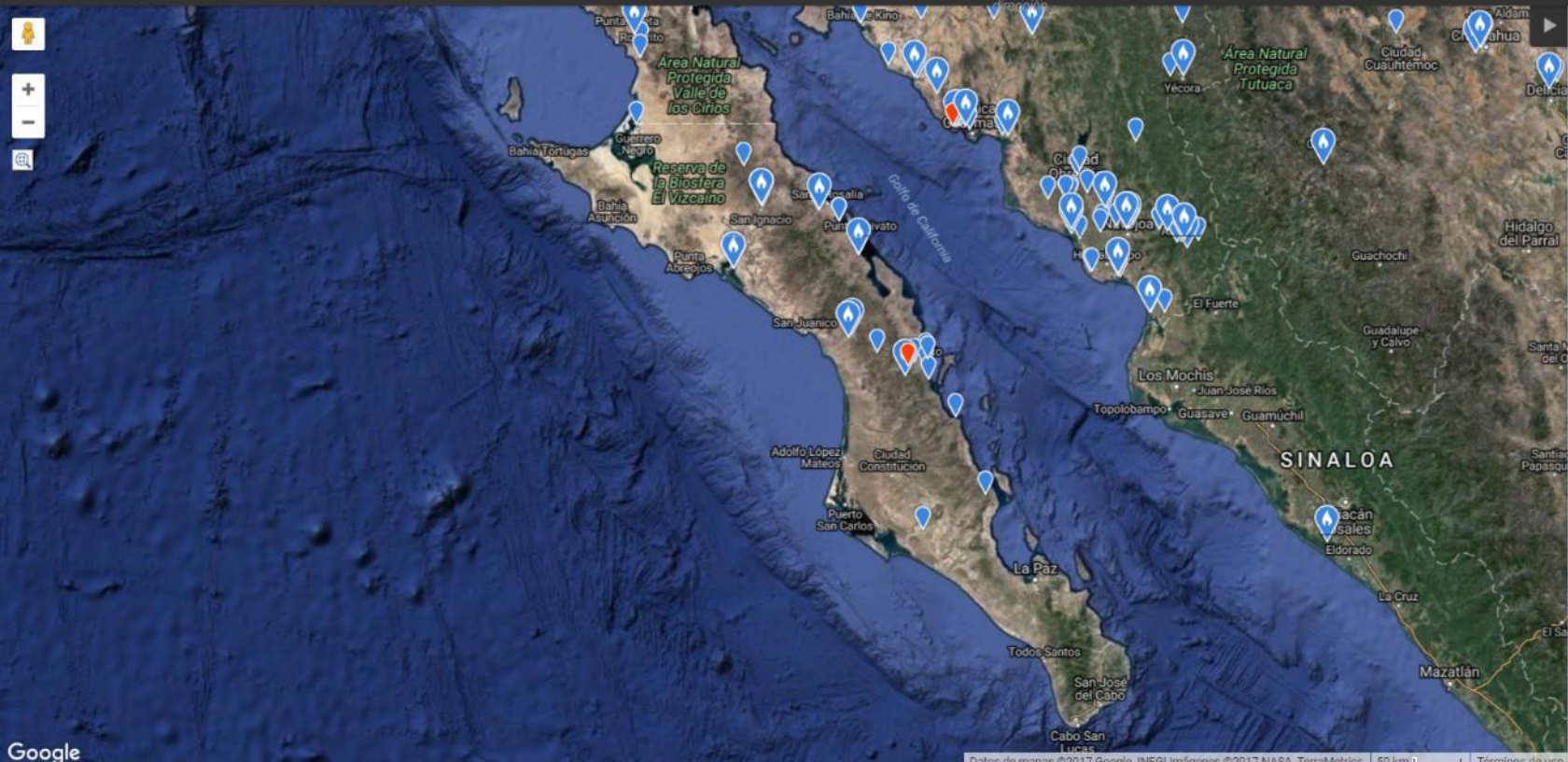
- ___ Dusky-capped Flycatcher *Myiarchus tuberculifer*
- ___ Ash-throated Flycatcher *Myiarchus cinerascens*

Catbirds, Mockingbirds, and Thrashers

- ___ Orange-crowned Warbler *Leiothlypis celata*
- ___ MacGillivray's Warbler *Geothlypis trichas*

● Herramienta de aprendizaje

Especies: **Fecha:** **Localidad:**



Google

Para acercarse
☐ Distribución completa de la especie

☐ Relieve
☐ Carreteras
☐ Satélite
☒ Híbrido

☐ Explorar multimedia
Mostrar solo localidades con fotos, audio o video

☒ Revelan puntos exactos
Selecciona esta opción (marcar la cajita) para mostrar puntos en escalas más amplias cuando sea posible: hay límite máximo de 2000 puntos.

RECIENTE **MÁS VIEJO (>30 DÍAS)**

☒ ☐ Sitio de interés
☒ ☐ Localidad personal

Planeación de viajes

Sitio de interés:

Fecha:

Localidad:

[Send Feedback](#)

Para acercarse

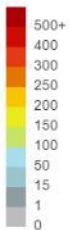
TIPO DE MAPA

- ☐ Carreteras
- ☐ Relieve
- ☐ Satélite
- ☒ Híbrido

FILTRAR POR ACTIVIDAD RECIENTE

- ☒ Todos los sitios
- ☐ Últimos 30 días
- ☐ Últimos 7 días

ESPECIES REGISTRADAS



Planeación de viajes

Basado en 2.825 listas completas

120 Especies registradas en Tamaulipas, MX que necesitas para tu Mexico Vitalicio listado (589 especies)

Imprimir

Ordenar por ▼

1.	Black-throated Green Warbler <i>Setophaga virens</i>	13,20% frecuencia	Mapa
2.	White-eyed Vireo <i>Vireo griseus</i>	13,03%	Mapa
3.	Black-headed Saltator <i>Saltator atriceps</i>	12,42%	Mapa
4.	Red-lored Parrot <i>Amazona autumnalis</i>	8,99%	Mapa
5.	Chihuahuan Raven <i>Corvus cryptoleucus</i>	8,18%	Mapa
6.	Flame-colored Tanager <i>Piranga bidentata</i>	7,89%	Mapa
7.	Singing Quail <i>Dactylortyx thoracicus</i>	6,23%	Mapa
8.	Green Parakeet <i>Psittacara holochlorus</i>	6,19%	Mapa
9.	Fan-tailed Warbler <i>Basileuterus lachrymosus</i>	5,38%	Mapa
10.	Yellow-faced Grassquit <i>Tiaris olivaceus</i>	5,35%	Mapa
11.	Red-crowned Parrot <i>Amazona viridigenalis</i>	5,31%	Mapa
12.	Indigo Bunting <i>Passerina cyanea</i>	5,27%	Mapa

Ir arriba ▲

Herramienta portátil

 TheCornellLab

FECHA

06 oct. 2020

HORA DE INICIO

18:29

REGISTRAR RECORRIDO 

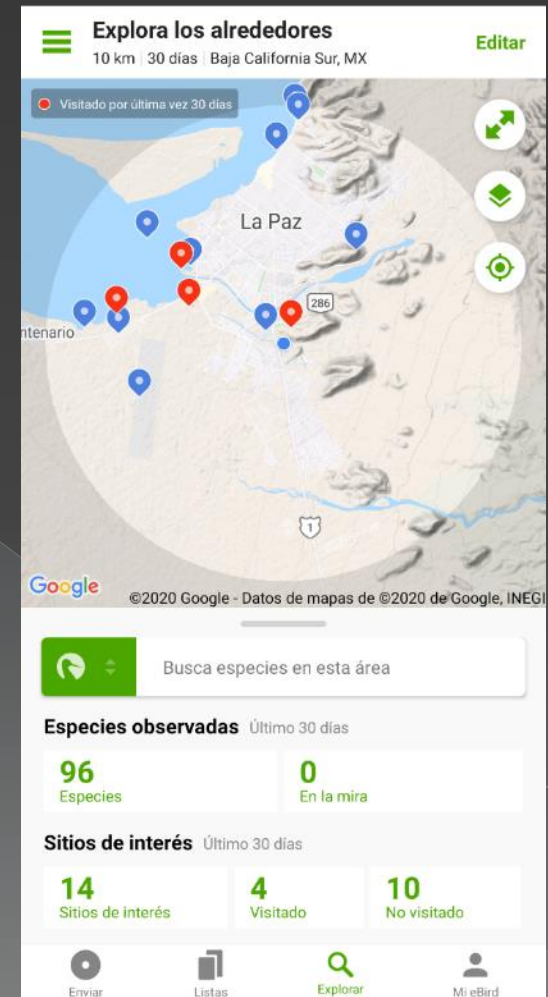
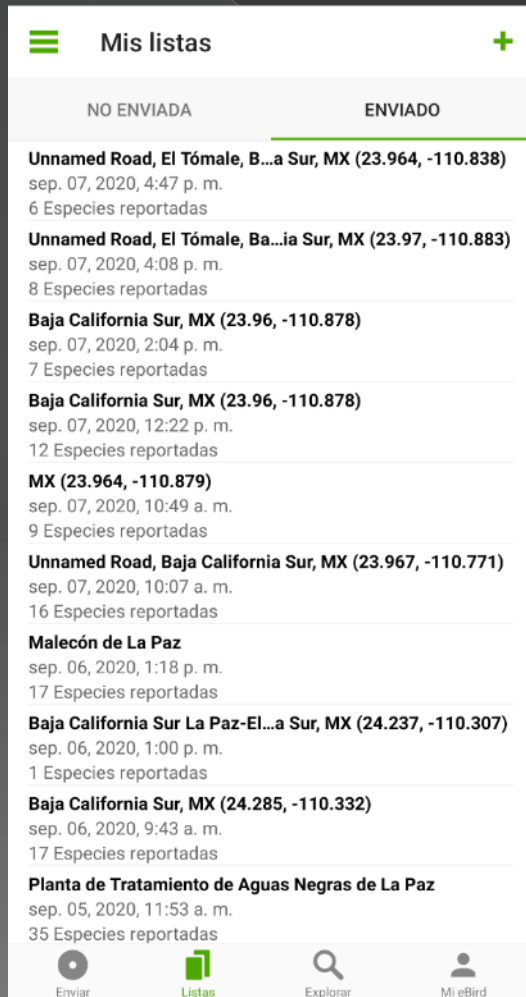
Iniciar lista

Enviar Listas Explorar Mi eBird



Herramienta portátil



Aves marcadas

- Investigaciones de distribución
- Relevante en aves migratorias



Banded Bird Encounter Reporting

- México, Estados Unidos y Canadá





**CERTIFICADO DE APRECIACIÓN
OTORGADO A:**



GERARDO MARRÓN

Datos del Anillaje

Número del Anillo 1135-02687

K581

Anillado 06/26/2014

Especie CHARRÁN CASPIA

Sexo DESCONOCIDO

Edad del Ave MUY JOVEN PARA VOLAR CUANDO FUE ANILLADO EN 2014

Lugar CERCA WALLA WALLA, WALLA WALLA COUNTY, WASHINGTON, USA
(COORDENADAS: LAT: 46.125; LON: -118.925)

Anillador DR DANIEL D ROBY
OREGON COOPERATIVE WRU
OREGON STATE UNIVERSITY
104 NASH HALL
CORVALLIS OR 97331 3803

Datos del Encuentro

Lugar CERCA LA ARDILLA, BAJA CALIFORNIA SUR, **Encontrado** 12/14/2014
MEXICO



American Birding Association

- Reporte por temporada
- Incluye la península de Baja California
- Encargado Richard Erickson
- ...



Annotated Checklist of the Birds of Baja California and Baja California Sur, Second Edition

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Abstract

We provide information on 514 native species we consider documented for the states of Baja California, Baja California Sur, and associated islands and jurisdictional waters; 225 have been confirmed nesting in the area. The information provided includes occurrence codes, seasonal status, nesting status, and level of documentation. More species, especially nesting species, have been recorded in Baja California (473, 206 confirmed nesting) than in Baja California Sur (423, 144). Non-native species and species of hypothetical occurrence are also considered. The role that North American Birds has played in the recording and documentation of these birds is emphasized. We conclude with a discussion of some research opportunities among the birds of the peninsula.

Overview

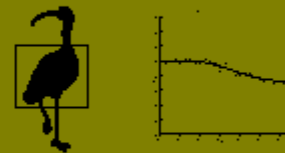
Much has changed since the first clearly defined bird lists for Baja California and Baja California Sur were published 12 years ago (Howell et al. 2001). Digital photography has become widely used, many museum databases have become easily accessible online, and eBird/VerAves has become a global phenomenon in data collection and storage. But during this time, the functioning of the Baja California Peninsula Region for North American Birds (began in 2000) has been the primary facilitator for the accumulation of knowledge and documentation concern-

Figure 1. Baja California, Baja California Sur, associated islands, and jurisdictional waters to 200 nautical miles (370.4 km) offshore. The checklist area includes large areas of littoral and pelagic habitats. Map by Zachary A. Henderson, LSA Associates, Inc.

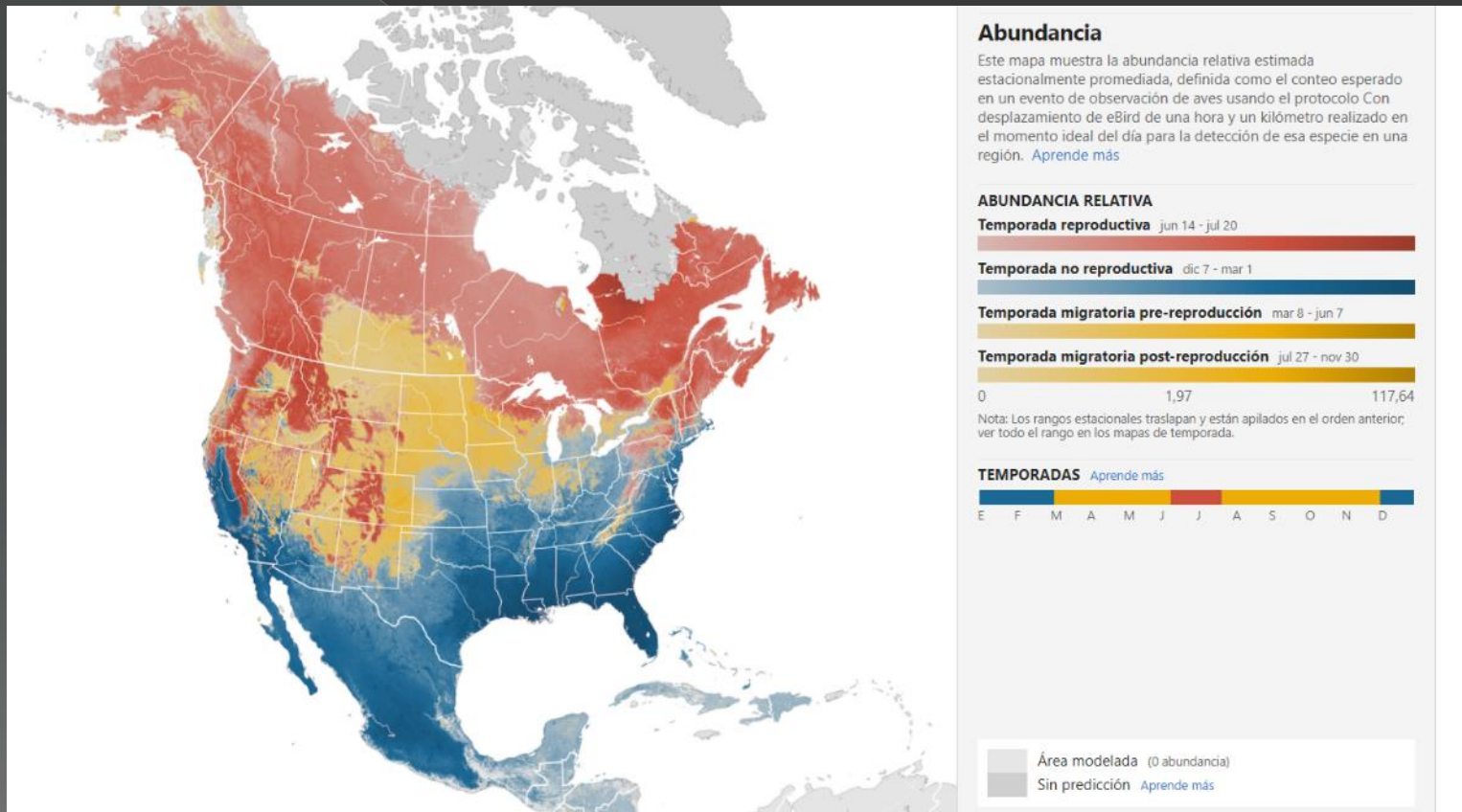
¿Otras formas de participar?



**The
North American
Breeding Bird
Survey**



¿Qué beneficios tiene?



Yellow-rumped Warbler

Setophaga coronata

Abundancia

Este mapa anima la abundancia relativa estimada semanalmente, definida como el conteo esperado en un evento de observación usando el protocolo Con desplazamiento de eBird de una hora y un kilómetro realizado en el momento ideal del día para la detección de esa especie en una región.

ABUNDANCIA RELATIVA



SEMANA DEL AÑO 4 de enero



Área modelada (0 abundancia)
Sin predicción

Datos de eBird de 2014-2018. Estimado para 2018.

Fink, D., T. Auer, A. Johnston, M. Strimas-Mackey, M. Iliff, y S. Kelling. eBird Estado y tendencias. Versión: noviembre 2019. Disponible: <https://ebird.org/science/status-and-trends>. Laboratorio de Ornitología de Cornell, Ithaca, New York.

Por ejemplo:

A CHRISTMAS COUNT ANALYSIS OF WOODPECKER ABUNDANCE IN THE UNITED STATES

CARL E. BOCK AND LARRY W. LEPTHIEN

The science of biogeography ideally includes consideration of both the distribution and density of species. Traditionally, biogeographers have studied only the ranges of species, because of difficulties inherent in measuring population densities over broad geographic areas. On the other hand, animal ecologists (e.g., Andrewartha and Birch 1954, MacArthur 1972) have suggested that those same environmental factors which control the distribution of a species also affect its pattern of abundance within that distribution.

Woodpeckers are among the best known groups of North American birds. Nearly all of the 20 species found north of Mexico have received careful attention. We know where they occur and we know in general what foraging strategies they employ. However, few studies have attempted to determine large-scale patterns of population density.

The National Audubon Society Christmas count data, published as local population censuses, are of varying quality, but collectively are of such magnitude as to reveal continent-wide population phenomena. In this study we have used Christmas count data to analyze some patterns of winter abundance of North American woodpeckers, with a goal of revealing more about the ecology and adaptation of the species than would be possible from simple analyses of their distributional limits.

Por ejemplo:

The Condor 108:13–24
© The Cooper Ornithological Society 2006

A HIERARCHICAL MODEL FOR REGIONAL ANALYSIS OF POPULATION CHANGE USING CHRISTMAS BIRD COUNT DATA, WITH APPLICATION TO THE AMERICAN BLACK DUCK

WILLIAM A. LINK^{1,3}, JOHN R. SAUER¹, AND DANIEL K. NIVEN²

¹U.S. Geological Survey Patuxent Wildlife Research Center, 12100 Beech Forest Road, Laurel, MD 20708-4039

²National Audubon Society, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820

Abstract. Analysis of Christmas Bird Count (CBC) data is complicated by the need to account for variation in effort on counts and to provide summaries over large geographic regions. We describe a hierarchical model for analysis of population change using CBC data that addresses these needs. The effect of effort is modeled parametrically, with parameter values varying among strata as identically distributed random effects. Year and site effects are modeled hierarchically, accommodating large regional variation in number of samples and precision of estimates. The resulting model is complex, but a Bayesian analysis can be conducted using Markov chain Monte Carlo techniques. We analyze CBC data for American Black Ducks (*Anas rubripes*), a species of considerable management interest that has historically been monitored using winter surveys. Over the interval 1966–2003, Black Duck populations showed distinct regional patterns of population change. The patterns shown by CBC data are similar to those shown by the Midwinter Waterfowl Inventory for the United States.

Key words: *Anas rubripes*, Bayesian, Christmas Bird Count, count data, hierarchical models, Markov chain Monte Carlo.

Un Modelo Jerárquico para el Análisis Regional del Cambio Poblacional Empleando Datos de Censos Navideños de Aves, con una Aplicación al Caso de *Anas rubripes*

Resumen. El análisis de los datos de los censos navideños de aves es complicado por la necesidad de tener en cuenta la variación en el esfuerzo en los censos y de proveer resúmenes a través de regiones geográficas amplias. En este estudio describimos un modelo jerárquico para analizar los cambios en las poblaciones usando datos de censos navideños que suple esas necesidades. El efecto del esfuerzo es modelado paramétricamente, haciendo variar los valores de los parámetros entre estratos como efectos aleatorios distribuidos idénticamente. Los efectos del año y del sitio son modelados jerárquicamente, teniendo en cuenta la amplia variación regional en el número de muestras y la precisión de los estimados. El modelo resultante es complejo, pero es posible realizar un análisis Bayesiano empleando técnicas de cadenas de Markov Monte Carlo. Analizamos datos de censos navideños para *Anas rubripes*, una especie de considerable interés desde el punto de vista de manejo que ha sido monitoreada históricamente por medio de censos durante el invierno. En el intervalo entre 1966 y 2003, las poblaciones de *A. rubripes* mostraron patrones marcados de cambio a nivel regional. Los patrones mostrados por los datos de los censos navideños son similares a los que muestran los inventarios de aves acuáticas de mitad del invierno realizados en los Estados Unidos.

Por ejemplo:

Christmas Bird Count Provides Insights Into Population Change in Land Birds That Breed in the Boreal Forest

Daniel K. Niven¹, John R. Sauer², Gregory S. Butcher³, William A. Link²

¹National Audubon Society, Illinois Natural History Survey, 607 East Peabody Drive, Champaign, IL 61820

²USGS Patuxent Wildlife Research Center, 12100 Beech Forest Drive, Laurel, MD 20708

³National Audubon Society, 1150 Connecticut Avenue, N.W., Washington, DC 20036

The boreal region is a vast area, representing one of the largest remaining intact forest ecosystems (Canadian Boreal Initiative, 2003). It spans North America, covering six Bird Conservation Regions (BCRs) (Rich et al. 2004). Four BCRs comprise the heart of the Canadian boreal forest: the Northwestern Interior Forest (BCR 4), the Boreal Taiga Plains (BCR 6), the Taiga Shield and Hudson Plains (BCR 7), and the Boreal Softwood Shield (BCR 8) (Figure 1). Most of the region is remote, far from roads or other access points for humans, but visiting it can be a breathtaking experience. Given its size and remoteness, the boreal forest may seem to be largely removed from the conservation threats facing much of the developed world. In fact, it isn't. The boreal forest is influenced directly by human activities such as changing forestry practices and hydroelectric development, and indirectly by global climate change. As these changes influence the region, increasing concern about populations of wildlife has led to initiatives that focus conservation activities and increase public awareness of this critical forest

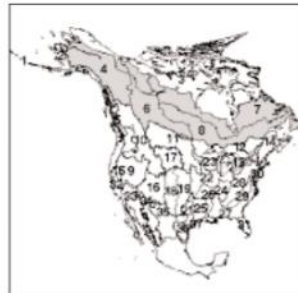


Figure 1. Bird Conservation Regions (BCRs) of the United States and Canada. Source: www.nabci-us.org/bcrs.html. The four highlighted BCRs constitute the boreal region for the purpose of this paper: the Northwestern Interior Forest (BCR 4), the Boreal Taiga Plains (BCR 6), the Taiga Shield and Hudson Plains (BCR 7), and the Boreal Softwood Shield (BCR 8). BCR names are given in the Appendix.

resource and the species it harbors (e.g., Boreal Songbird Initiative [www.boreal-birds.org], Canadian Boreal Initiative [www.borealcanada.ca/], and Ducks Unlimited Canada, [www.ducks.ca/]).

At least 186 species of land birds breed in the boreal forest, and more than 1 billion of these birds overwinter in the

United States, accounting for an estimated 10 percent of the number of land birds that spend the winter in the continental United States (Blancher 2003). Unfortunately, we know very little about the population trends of the birds that are most highly dependent upon the boreal forest ecosystem. The primary source of information on population change in land birds is the continentwide North American Breeding Bird Survey (BBS). Administered by the United States Geological Survey and the Canadian Wildlife Service and initiated in 1966 (Sauer et al. 2004), the BBS is currently monitoring more than 4,000 survey routes in the United States and Canada. However, the BBS is conducted by volunteers and is a roadside survey, and the extremely limited number of both roadsides and volunteer observers in the boreal forest have limited BBS coverage to only a small part of the southern boreal region. Consequently, BBS results provide an incomplete picture of continentwide population trends of boreal species.

Luckily, for the suite of boreal species that winter in the United States and/or

En resumen:

