

**Waterfowl Report for 4 April 2019**  
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**Migration Summary:**

BIRDS ARE MOVING! Waterfowl activity in the past 24 hours has been outstanding. I started this report yesterday and have had to change it nearly every few hours. Most notable: yesterday, my SN/ROGO numbers for Freezout were ~ 1100, this morning they were 2680, and I \*just\* received a report that the numbers are upwards of 20,000 and growing.

April is recorded to be the busiest month at the Berkeley Pit. This month is proving to be no different. Within the last 24 hours nearly all of the visible ice has melted from the Pit surface and bird numbers are increasing dramatically. SN/ROGO numbers are growing, albeit later than in past years. This time last year Freezout reported 100,000 SN/ROGO in their area. The report from yesterday indicates only sighting 1,100 SN/ROGO, today ~~the numbers are about twice that~~ the number skyrocketed to 20,000+. We finally have high activity and elevated biodiversity for this area. AMCO numbers are building and RUDU are low but will start to grow soon; I've included maps for these two species.

2017 Species	15-Mar	1-Apr	15-Apr	2018 Species	15-Mar	1-Apr	15-Apr
<b>Canada Goose Observed by Berkeley Pit</b>				Common Merganser Observed on Berkeley Pit			
<b>Snow Goose Observed by Berkeley Pit</b>				Hooded Merganser Observed on Berkeley Pit			
Trumpeter Swan Observed by Berkeley Pit				Red-breasted Merganser Observed by Berkeley Pit			
<b>Tundra Swan Observed by Berkeley Pit</b>				<b>Canada Goose Observed by Berkeley Pit</b>			
Common Goldeneye Observed by Berkeley Pit				<b>Snow Goose Observed by Berkeley Pit</b>			
Barrow's Goldeneye Observed by Berkeley Pit				Horned Grebe Observed by Berkeley Pit			
American Coot Observed by Berkeley Pit				<b>Eared Grebe Observed by Berkeley Pit</b>			
<b>Bufflehead Observed by Berkeley Pit</b>				<b>Red-Necked Grebe Observed by Berkeley Pit</b>			
<b>Ring Billed Gull Observed by Berkeley Pit</b>				Loon Observed by Berkeley Pit			
<b>California Gull Observed by Berkeley Pit</b>				<b>Red Head Observed by Berkeley Pit</b>			
Bonaparte's Gull Observed by Berkeley Pit				<b>Lesser Scaup Observed by Berkeley Pit</b>			
Franklin's Gull Observed by Berkeley Pit				Greater Scaup Observed by Berkeley Pit			
<b>Gadwall Observed by Berkeley Pit</b>				<b>Ring-Necked Duck Observed on Berkeley Pit</b>			
Ruddy Duck Observed by Berkeley Pit				<b>American Widgeon Observed on Berkeley Pit</b>			
<b>Northern Shoveler Observed by the Berkeley Pit</b>				<b>Canvasback Observed on Berkeley Pit</b>			
<b>Mallard Observed by the Berkeley Pit</b>				<b>Northern Pintail Observed on Berkeley Pit</b>			
Western Grebe Observed by Berkeley Pit				American Avocet Observed by Berkeley Pit			
				Green-Winged Teal Observed by Berkeley Pit			
				Double-Crested Cormorant Observed by Berkeley Pit			

**Laser Demo Update:** The Waterfowl Advisory Board met to discuss the activity of testing lasers at Warm Springs Ponds (WSP)/Warm Springs Wildlife Management Area (WMA). One of the leading goals of the tests is to understand the physical limitations of the laser equipment with regard to aspects such as weather and batter life. That said, the primary concern of the Board was for the well-being of the waterfowl in a prime staging area during a time of unusual harsh weather. The original laser demo was scheduled to start while there was still substantial ice cover on WSP. The primary concern was over stressing the birds during an important resting time of migration with the clear possibility of pushing them out of the area and onto the Pit.

The group met on Tuesday morning from 9:00-10:00 and discussed options to vary the laser testing strategy at WSP and still explore the chronic use of lasers as a deterrent. The advisory group was against testing during times of harsh conditions during which the priority of animal well-being superseded that of data collection. The group also recommended testing in iterations of two nights on, two nights off paired with evening and morning monitoring of the test area and adjacent ponds. The goal of iterative testing is three fold: 1) provide rest days for in-coming birds; 2) develop a comparison of avian presence between two adjacent open-water sources (though not enough controls to be statistically significant; 3) develop a comparison of avian presence between the *on nights* and *off nights* (also insufficient controls to be statistically significant). Gary Swant agreed to help oversee the testing and monitor the avian activity to help ensure the birds using this area were not unnecessarily stressed and to

help cross check and verify species counts. An additional recommendation was made that avian monitoring equipment (binoculars and scope) be sufficient quality to gather data across the distance of the test site and in low-light conditions; Zeiss, Swarovski, and Leica equipment are among the top brands that may be considered.

**Weather conditions western US/Canada (4 April-11 April):** The Pacific flow is moving west to east that results in temperatures closer to normal and precipitation across the region that is higher than normal. Drier side will be the east side of the Canadian and Northern US Rockies. Changing air currents and wide-spread cloud cover will bring classic spring-storms throughout the region.

Moving south to north, east to west...

*Southern-mid California:* Compared to the region as a whole, the southern region is the driest but further northward the precipitation increases and is substantial in central-to-northern California.

*Central Rockies (Utah/Nevada/Colorado):* This basin starts off cool and unsettled through Saturday, a brief break Sunday/Monday and then the weather goes back to cool and unsettled vernal activity.

*Northern coast (Upper CA- PNW):* Similar to last week and the area as a whole: Temperatures are reflective of the weather activity. Currently cooler with the overcast cloud cover and precipitation. This region will carry the brunt of the storm pattern.

*Regional (BSB/ Northern Montana):* Temperatures are increasing into the 40s/50s during the day and dipping in to the 40s at night with some areas that still reach freeze. The Jetstream and main flow is moving northward which will result in an increase in wind in this area. This will be accompanied by on-and-off precipitation and the expected cloud cover for the next week. Tuesday is expected to have the most activity and may include snow over the Tuesday-Wednesday time frame.

*Canada/AK:* A wide range of weather patterns in this area. AK is drier and on the warmer side. An increase in cloud cover and precipitation further inland. As stated above, the rain shadow effect leaves the eastern side of the Mountains on the drier side.

### **Weekly Summary of Bird activity:**

**Hazing level recommendation: Heightened.** Ice is open and birds are moving in. Extra deterrent measures (fireworks) and hazing techniques are being prepared in case of a large event.

The weather team met for 20 minutes this week.

***Top species identified at the Pit*** (M. Mariano): The water at the Pit is rapidly retreating. 327 individuals: SNGO (48), CANG (3), TUSW (21), NOSH (9), AMWI (18), MALL (13), NOPI (27), LESC (1), COGO (28), BAGO (4), PBGR (2), RBGU (153), SACR (4)

***Top species identified at the Lexington Ponds*** (J. Sellmer) 40% Ice cover, BAGO (6), CANG (5), AMCO (3), CAGU (3) GBHE (2), MALL (2), TRUS (1)

***Top species for the local region/CFV/WMA*** (G. Swant): CANG (303), NOSH (258), AMWI (491), CANV (766), COGO (1275), AMCO (684), LESC (337), RBGU (224).

***Top species from Helena Region<sup>1</sup>*** (R. Hazlewood): SNGO (1200), CANG (670), TRUS (111), MALL (830), NOPI (125), REDH (420), RNDU (35), BAGO (28), AMWP (19), AMCO (356), CAGU (3750)

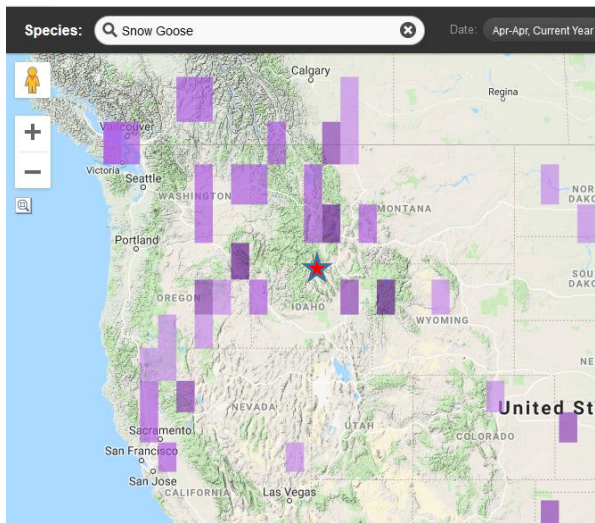
***Freezout Lake area:*** (M. Schwitters/N. Milewski): Birds are active and building. SN/ROGO (~~1100, 2680~~, 20,000+ ), Swans (76).

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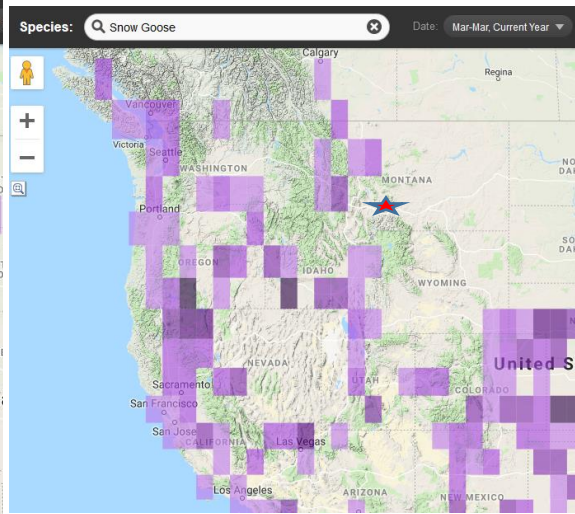
<sup>1</sup> Helena Reservoir and Lake Helena combined

MAPS: Butte marked with a red star ★

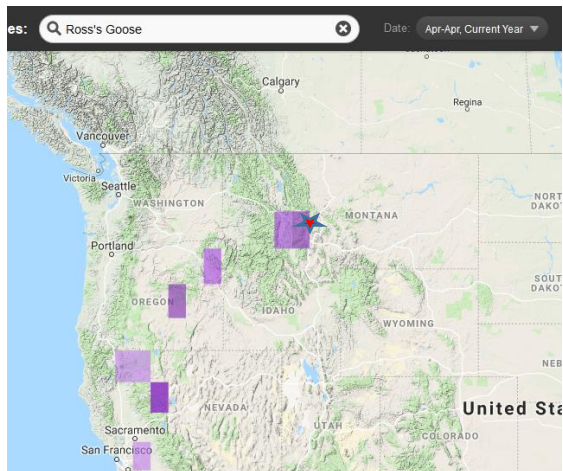
SNGO sightings from e-bird 3 April 2019



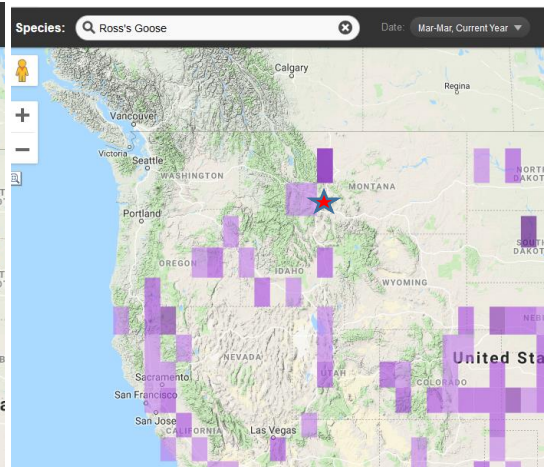
SNGO sightings from e-bird 29 March 2019



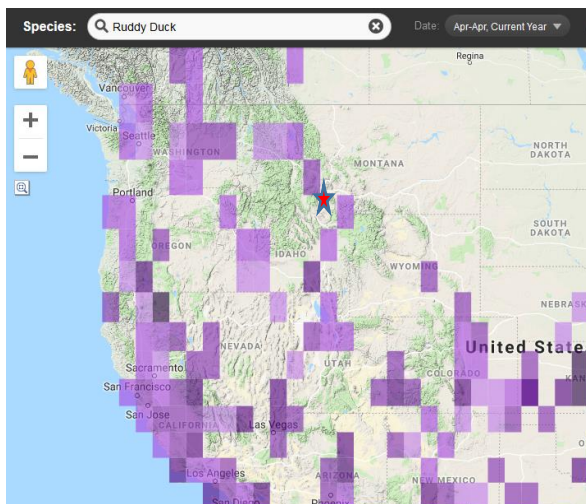
ROGO sightings from e-bird 3 April 2019



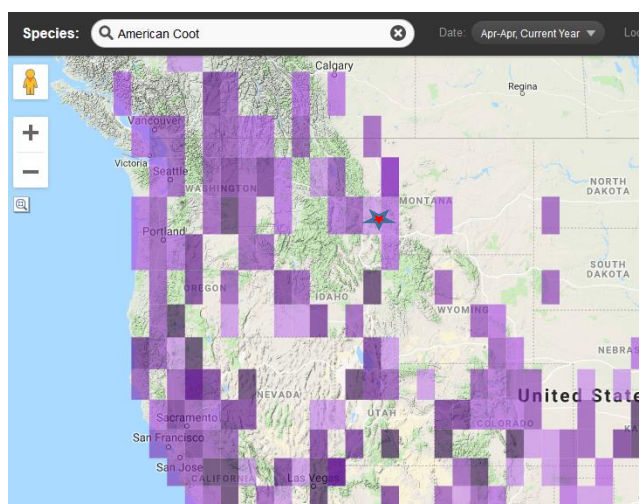
ROGO sightings from e-bird 29 March 2019



RUDU sightings from e-bird 3 April 2019

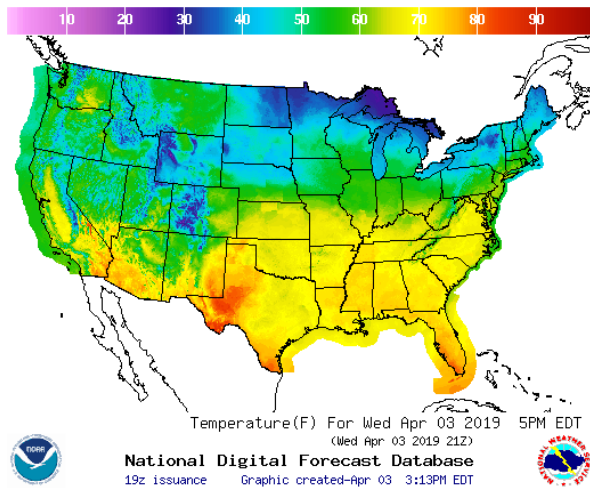


AMCO sightings from e-bird 3 April 2019

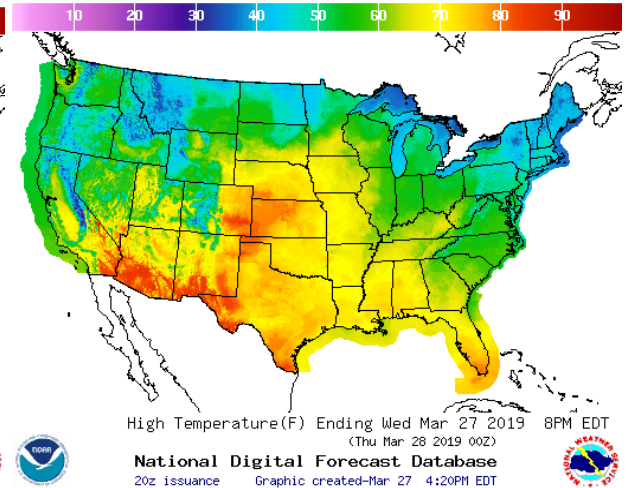




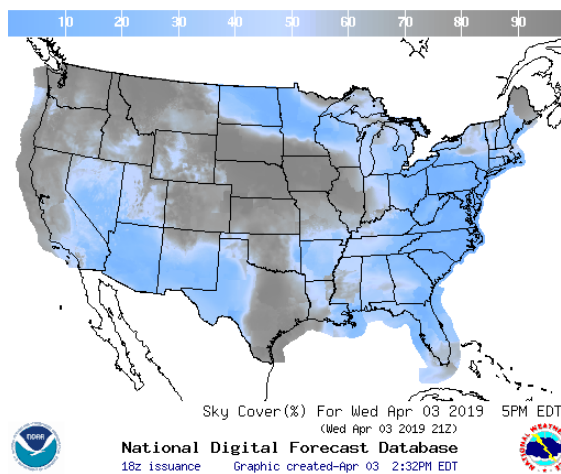
### Temperature forecast: 3 April 2019



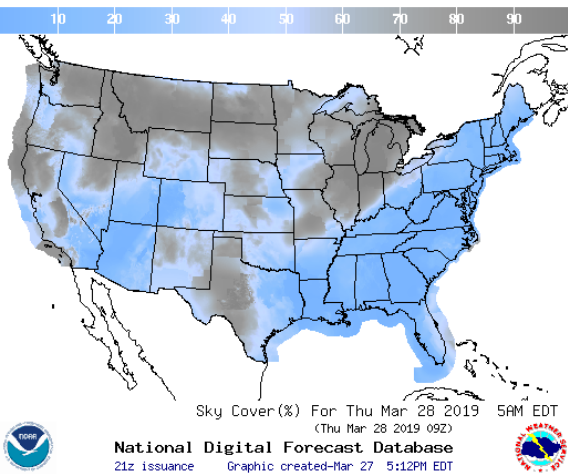
### Temperature forecast: 28 March 2019



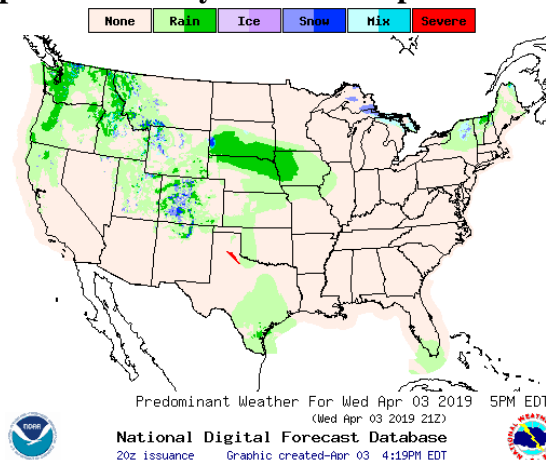
### Sky cover forecast: 3 April 2019



### Sky cover forecast: 28 March 2019



### Precipitation activity forecast: 3 April 2019



### Precipitation activity forecast: 20 March 2019

