

WINTER 2021

Windows to Wildlife

Your support at work in Idaho's landscapes



Western Monarch Update Living on the Edge

by Tempe Regan*, Regional Wildlife Diversity Biologist Salmon Region, Idaho Department of Fish and Game

Monarch butterflies are an iconic, well-recognized, and much-beloved species. They are the official state insect of Idaho. Their striking orange and black-patterned wings and large size make them a butterfly we all know and love. Together, we wait each year for butterflies to magically appear on local milkweed patches. We take our children to observe the brilliantly colored caterpillars feeding their way across a milkweed leaf, the only source of food for these chubby, fascinating creatures. We even collect a formed chrysalis, take it home, and enjoy watching it turn from jewel-tone, gold-spangled green into a clear window to the black and orange beauty emerging from within. We plant milkweed for monarchs, hoping they will show up in our backyards. But each year, the number of sightings in Idaho and across western North America has declined. Milkweed patches sit uninhabited and devoid of any butterflies or caterpillars. What is happening and how can we help?

The western monarch population used to be prolific, with numbers in the millions of individuals. Breeding west of the Rockies and migrating to hundreds of wooded groves along the California coast to winter, monarchs cluster in dense groups on the branches, leaves, and trunks of trees. Monitoring counts conducted during Thanksgiving at overwintering sites in California

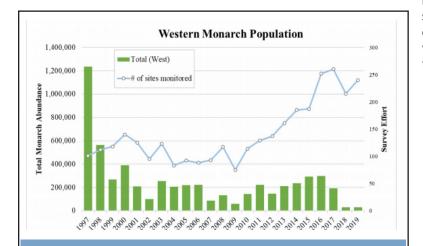
for the last 23 years provide crucial data for population monitoring. Unfortunately, the picture these overwintering counts are painting is not pretty. The population went from between 3 - 10 million butterflies in the mid-1980s to 200 - 300 thousand butterflies in the early 2000s where it has remained for the most part until 2018. Then during the winter counts of 2018 and 2019. less than 30,000 monarchs were observed on overwinter sites. The news for 2020 is devasting. Fewer than 2,000 butterflies were observed - a greater than 99% decline since the 1980s! How can so few butterflies migrate, find each other in a large landscape, breed successfully, and have enough caterpillars reach maturity to begin recovering that gap?

30,000 butterflies is an important benchmark for the western Monarch population as it is the threshold below which scientists estimate population extinction is inevitable. Small populations, even if formerly prolific, are more vulnerable to "ordinary" environmental variation; i.e., one storm could wipe out a handful of overwintering sites and effectively wipe out half the population compared to a population of



millions of butterflies that may be better able to withstand such an impact. Clearly, in 2020 we are well below that 30,000 threshold. Understanding the cause of this decline informs the way we can seek to mitigate and conserve what is left of the western population of monarchs.

The main drivers of the decline include loss of milkweed and other flowering plants; degradation and loss of overwintering sites in California and widespread pesticide use, all of which can be magnified by changes in climate. During the spring and summer, native milkweeds provide food for larvae and caterpillars and other flowering resources fuel adult butterfly migration. During winter, groves of trees along the California coast provide essential conditions for monarch survival. Although protecting these overwintering sites has been identified as one of the main ways to improve chances of recovery for western monarchs, most of the overwintering sites in California remain unprotected. In the past five years, 21 sites, of which 20 were actively used by monarchs, have been damaged or destroyed by human actions - generally in the form of tree-trimming and reducing the size of groves to make way for urban development.



Thanksgiving counts showing the number of western North American monarch butterflies observed at overwintering sites (green bars). The blue line shows the number of sites monitored (survey effort) for a given year. Data from The Xerces Society for Invertebrate Conservation 2020, entire.

For all of 2020, we have been waiting with bated breath for the United States Fish and Wildlife Service (USFWS) to assess the breadth of data available on monarchs and make their listing decision for this charismatic insect under the Endangered Species Act (ESA). The first petition for listing under the ESA was filed in 2014. In 2016, the USFWS began an in-depth species status assessment, looking at not only at the North American population but the global population. Monarchs occur in 90 other countries, however, 90% of the world's monarch population occurs in North America and those that occur in other countries are thought to have originated from North America. On December 15th, 2020, the FWS decision came out: warranted but precluded. Meaning, Monarchs are deemed justifiably warranted for listing as threatened or endangered but precluded, or put off for now, due to work burdens for other higher-priority listing actions. Monarchs were assigned a listing priority number of eight which indicates the magnitude of the threat is moderate and those threats are imminent. There are currently 161 species in the USFWS work plan that are a higher priority than monarchs. Thus monarchs inch forward in the listing process. They are now formally considered a candidate for listing

under the ESA until the USFWS proposes a listing decision or makes a not warranted determination – which will be in 2024. However, legal obligations to meet court orders, litigation and settlements due to litigation can affect the USFWS ability to work on new species. We should not wait for a formal listing as "threatened" or "endangered" to start conserving monarchs. We must act now and hope it is not too late.

Monarch conservation has been ongoing and will continue to move forward. The listing decision may open up more funds and incentives towards monarch conservation across western landscapes. Wendy Caldwell, Executive Director of the Monarch Joint Venture, stated "Each of our partners, and many other stakeholders, come to the monarch conservation table with different approaches, audiences, strengths and opportunities to make a difference. There is a role for everyone in monarch conservation." Our role in Idaho is different than the role stakeholders play in other parts of the monarch range. In Idaho, we have no overwintering sites, but we do have five native milkweed species; the most widespread and easily recognized is showy milkweed. So it is our job to protect what milkweed patches we have left, to plant more native and locally sourced milkweed seeds, to provide critical nectaring resources, to manage the use of pesticides in key monarch habitats, and to educate others in what they can do by joining our fight to conserve the remnants of a formerly magnificent pollinator population.

More Information

The Xerces Society for Invertebrate
Conservation has issued a "Western Monarch
Call to Action" which can help the western monarch
population bounce back from its extrememly low
overwintering size.

The goal of this call to action is to identify actions that can be implemented in the short-term to avoid a total collapse of the western monarch migration and set the stage for longer-term efforts to have time to start making a difference.

Learn more at:

xerces.org/western-monarch-call-to-action

The Western Association of Fish and Widllife Agencies established the Western Monarch Working Group to lead a multi-state cooperative effort for conservation of the western monarch population. In an effort to reverse the population declines, the Working Group created the Western Monarch Conservation Plan that sets both population and habitat objectives across the monarch's range, including Idaho.

Read the plan here:

wafwa.org/wpdm-package/western-monarchbutterfly-conservation-plan-2019-2069/

HOW YOU CAN HELP MONARCH BUTTERFLIES



Plant Milkweed and Grow Pollinator-Friendly Flowers

Milkweed is the only host plant for monarch caterpillars. It is their sole food source - learn more about milkweeds in Idaho using this guide. Fill your yard with native plants to offer food, water, and cover and places to raise young monarch butterflies.

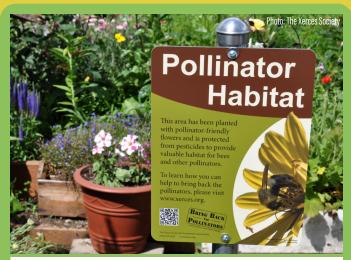
Read More



Avoid Pesticides

Insecticides, and those that contain neonicotinoids, kill monarch butterflies and their caterpillars; herbicides kill the plants they need to survive. Help monarchs and other pollinators like bees by learning which products to avoid and how to implement low-impact approaches to pest management.

Read More



Spread the Word

Make your commitment both official and visible by signing the <u>Pollinator Protection Pledge!</u> You can also share information about pollinators on <u>social media</u>, or spread the word with a <u>pollinator</u> <u>habitat sign.</u>

Read More



Share Your Observations

Help biologists determine important breeding areas for monarchs and their conservation needs by uploading your photos of monarchs and milkweeds.

Read More

IDAHO NONGAME WILDLIFE FUND



News from the Field

Chillin' Out - A Salamander in the Snow?

by Diane Evans Mack*, Wildlife Diversity Biologist McCall Subregion, Idaho Department of Fish and Game

It's always curious to see animals out of place, or in the right place at the wrong time. These oddities seem more dramatic in winter because conditions are so harsh — it's very cold, there's lots of snow, and many food items, like berries or insects, are scarce. When that Redwinged Blackbird shows up at a feeder in McCall in late December, or those two Sandhill Cranes in Indian Valley decide not to migrate south, or a black bear is still raiding trash cans in town in late November, my response is "What is that animal thinking?!?"

Such was the case recently. During the McCall Christmas Bird Count on December 20, when eyes were pointed to the treetops in Ponderosa State Park, one of my team members caught movement on the ground. Her surprised exclaim brought us all back to earth, and we looked down to see an intrepid little salamander making its way steadfastly across the groomed ski trail. Payette Lake was a short distance away and not yet frozen, but this individual was headed to the snowy woods. A ski trail is no place for a salamander, so we scooped it up and found a downed log with nooks and crannies and space underneath that we hoped would provide shelter.

The bright yellow stripe along the length of its back identified this as a Long-toed Salamander, one of the most common amphibians in the northwest. It is named for a longer toe on each hind foot. It is native to Idaho and is not a Species of Greatest Conservation Need. Long-toed Salamanders typically hibernate, or at least are dormant, in winter. Even in warmer months this species spends a lot of time underground, where it inhabits holes such as abandoned rodent burrows. It breeds in spring, sometimes traveling across or under the snow to reach breeding ponds that have begun to melt. It's hard to imagine that any breeding would be going on in Ponderosa State Park in late December, so this salamander's solitary journey remains a mystery.

Acknowledgements: Natural history information was obtained from a variety of sources, including the Burke Museum in Seattle Washington, Montana Field Guides, and Idaho Fish and Game species accounts online.



Long-toed Salamander's tails are an important part of their body. During the cold winter months, salamanders survive on energy reserves stored in their tail; when attacked or disturbed they will wave their tail while secreting a sticky white poisonous liquid to deter predators, and in extreme cases, it will drop its tail as a distraction and run!



On The Idaho Birding Trail

Hagerman Wildlife Management Area

1060 State Fish Hatchery Rd., Hagerman • (208) 324-4359 idfg.idaho.gov/wma/hagerman

†|† *****|

eBird ebird.org/hotspot/L853426 ebird.org/hotspot/L190825 ebird.org/hotspot/L1895556

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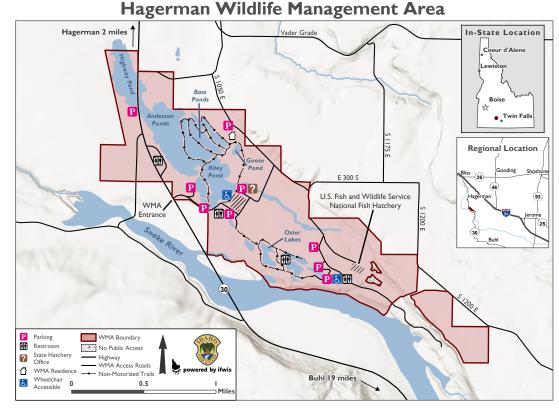
42.7671329,-114.877128



DIRECTIONS: I-84 Exit #155 (Hagerman/Wendell); zero mileage; west on Hagerman Way (2950 S) for 8.7 miles; at T intersection, turn left (south) on US 30; S on US 30 to rest area at milepost 183.6 to bird the planted trees and dike trail along the marsh; continue 0.3 miles south, at milepost 183.3, turn left onto State Fish Hatchery Rd. (WMA sign); go 0.5 mile to state and federal fish hatchery.

Hagerman typically winters 30,000-40,000 ducks. Amazing numbers of Bald Eagle and waterfowl can be present during winter especially when other water bodies are frozen. It is a great place to find rare gulls, especially in early spring, but only Herring, Ring-billed, and California are common. Glaucous, Lesser Black-backed, Mew, and Iceland Gulls can be found here too. Large populations of breeding waterfowl (Cinnamon and Green-winged

Teal, Gadwall, Redhead, and Ruddy Duck), Yellow-headed Blackbird, and Northern Harrier occur within the WMA. During spring and summer, waterbirds (American Coot, Piedbilled and Western Grebe, Virginia Rail, Sora, Forster's Tern), shorebirds (Black-necked Stilt, American Avocet, Long-billed Curlew), and a great diversity of songbirds are common. During migration, Common Loon, Tundra Swan, and other shorebirds can be seen.







Bird IDAHO



Species of Greatest Conservation Need

From the Mountains to the Sea - The Harlequin Duck

by Casey McCormack*, Wildlife Diversity Biologist Panhandle Region, Idaho Department of Fish and Game

Have you ever come across a duck in a place you maybe didn't expect? Maybe along a stream you might think is more suited for whitewater rafting and backcountry anglers? And if so, was that duck's markings vibrant and eye-catching like that of a clown, jester, or... maybe a harlequin? Well then you may have been fortunate enough to observe just that, a Harlequin Duck!

These little ducks are unique for more than their distinctive plumage. Unlike many of the more common waterfowl species found in Idaho, Harlequins are actually sea ducks that spend much of their lives on the coast and then migrate inland to mountain streams to breed and nest. While you may find other species of ducks and geese spending their time near lakes, wetlands, and large rivers, you are more likely to see a Harlequin in a remote, fast-flowing stream causally bouncing through whitewater. It is along these clear streams with dense forest vegetation along the banks in which Harlequins prefer to nest and raise their young. Males and females form long-term pair bonds and will migrate to these mountain streams together in April or May. Not long after incubation begins, males return to the coast to molt while females remain to raise their young. In August and September females and young will begin returning to the coast where the pair will eventually reunite.

Harlequin Ducks winter along northern coasts in the Atlantic and Pacific Oceans and will migrate inland to breed in Canada, Iceland, Greenland, Siberia and the United States. Those that winter off the coasts of Washington, Oregon, and Southern British Columbia will typically breed and nest in the mountains of the Inland Northwest. In Idaho, Harlequin Ducks are most commonly found in the northern half of the state along swiftly-flowing small and mid-sized tributaries such as the Lochsa River, North Fork of the Clearwater, Marble Creek, Middle Fork of the East River, Upper Priest River and others. It is possible for them to be found in other parts of the state as well, so keep an eye out!

Harlequin Ducks are sensitive to disturbances; if you are fortunate enough to see one please be respectful and admire them from afar. Unfortunately, Harlequin Ducks are an increasingly rare sight in Idaho and are classified as a Species of Greatest Conservation Need. The unique life history of these ducks and the specialized niche they fill make them more vulnerable than other species due to their low reproductive rate and particular habitat requirements.

HARLEQUIN DUCK SIGHTINGS WANTED







YOUR OBSERVATIONS CAN HELP!

The Idaho Department of Fish and Game needs your help locating Harlequin Ducks in Idaho. Harlequin ducks are typically found on swiftly-flowing mountain streams where they breed and nest. If you observe a Harlequin Duck, please call or send us your observations. Historical reports are also welcomed!

PLEASE MAKE NOTE OF:

- ▶ Sex and number of Harlequin Ducks observed
- \blacktriangleright Location of sighting (coordinates helpful)

WHEN AND WHERE TO LOOK:

- ► Harlequin Ducks form pair bonds on their wintering grounds on the coast and migrate inland to breed.
- ► Look for breeding pairs from mid-April to early June.
- ► When females begin incubating eggs, males leave their mates and migrate back to the coast.
- ► Look for females with ducklings during July and August.



YOU CAN CONTACT US AT:

- ► Panhandle Region: (208) 769-1414 casey.mccormack@idfg.idaho.gov
- ► Clearwater Region: (208) 799-5010 joel.sauder@idfg.idaho.gov
- ► Or share your observation at: idfg.idaho.gov/species/observations



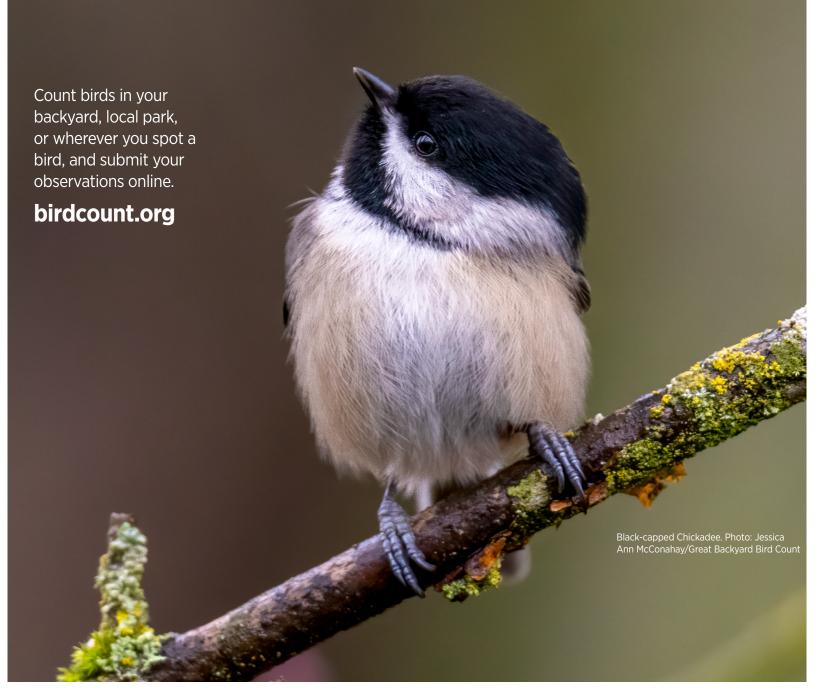




Male (left) and female (right) Harlequin Ducks near an Idaho stream.

Great Backyard Bird Count

24th Annual ● Feb 12–15, 2021













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