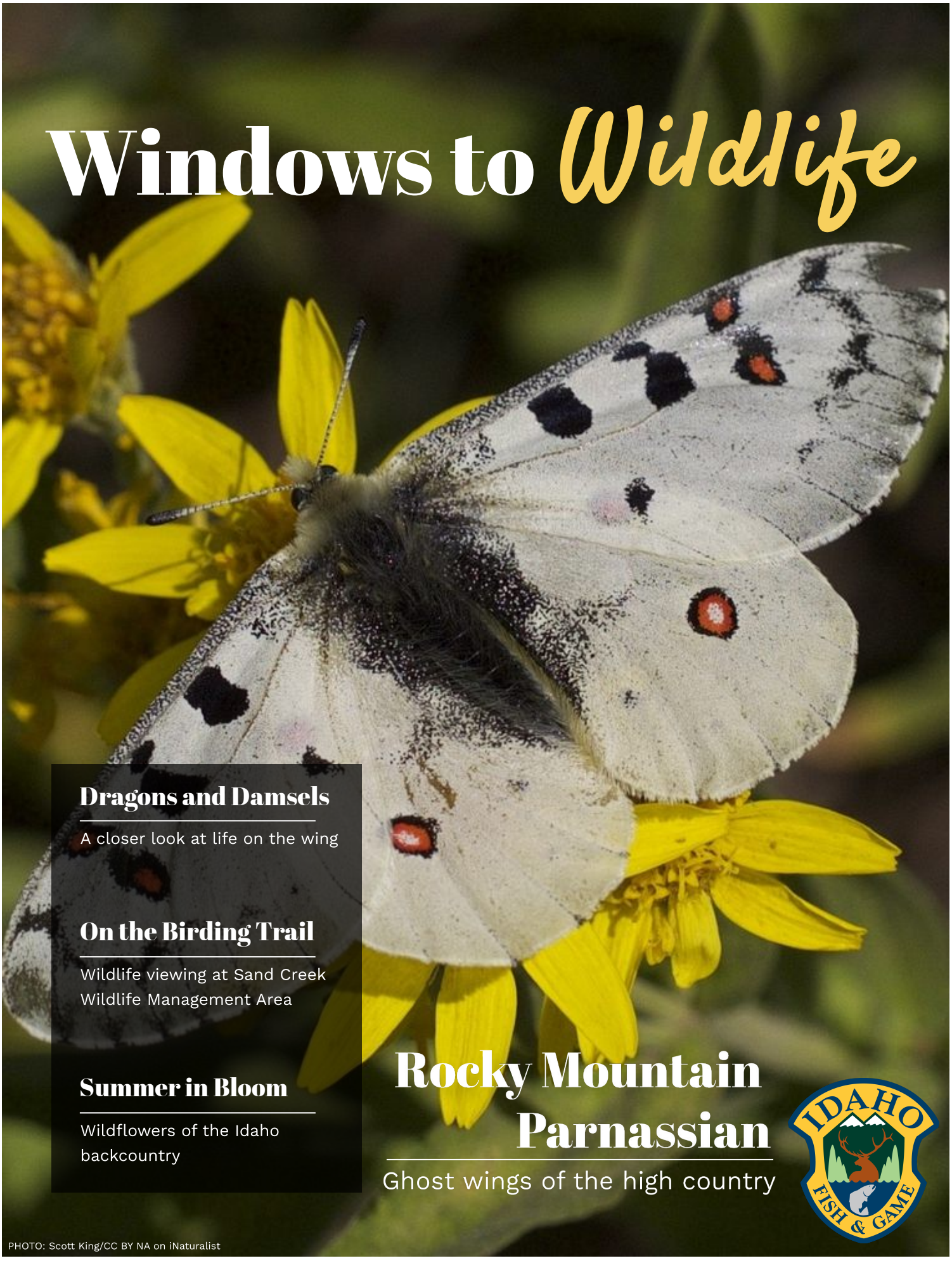
Windows to Wildlife



Dragons and Damsels

A closer look at life on the wing

On the Birding Trail

Wildlife viewing at Sand Creek Wildlife Management Area

Summer in Bloom

Wildflowers of the Idaho backcountry

Rocky Mountain Parnassian

Ghost wings of the high country

IDAHO FISH & GAME

PHOTO: Scott King/CC BY NA on iNaturalist

In This Issue

A vibrant meadow awash with wildflowers. PHOTO: Shutterstock

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Rocky Mountain Parnassian

Ghost Wings of the High Country

Species of Greatest Information Need

Idaho's Alpine Jewel

When you explore the alpine meadows and rocky slopes of Idaho's high mountains, you might catch a glimpse of a delicate, ghostly-white butterfly fluttering among wildflowers. This is the Rocky Mountain Parnassian, a stunning and specialized butterfly that embodies the wild spirit of Idaho's alpine landscapes.

A High-Elevation Specialist

The Rocky Mountain Parnassian is a member of the swallowtail family but lacks the characteristic tails on its wings. Instead, it sports translucent white wings marked with striking black and red spots. These butterflies are perfectly adapted to the cooler, harsher climates of mountain environments.

PHOTO: CC-BY-NA by maddiemlucas on iNaturalist

In Idaho, they are found primarily above 6,000 feet in elevation, frequenting open meadows, rocky ridges, and tundra-like habitats in mountain ranges such as the Sawtooths, Bitterroots, and the Lost River Range.

Life Cycle and Ecology

The life cycle of the Rocky Mountain Parnassian is closely connected to its high-mountain habitat:

- Females lay their eggs one at a time on or near their host plants, usually types of stonecrop.
- The caterpillars, like the one shown on the left, feed on these plants as they grow throughout the summer.
- They spend the winter as a chrysalis, surviving the cold under rocks or vegetation.
- Adult butterflies appear in mid-summer, usually flying from late June to early August, depending on how fast the snow melts and how high up they are.

These butterflies are important pollinators in their ecosystems, visiting a variety of wildflowers during their brief adult stage.

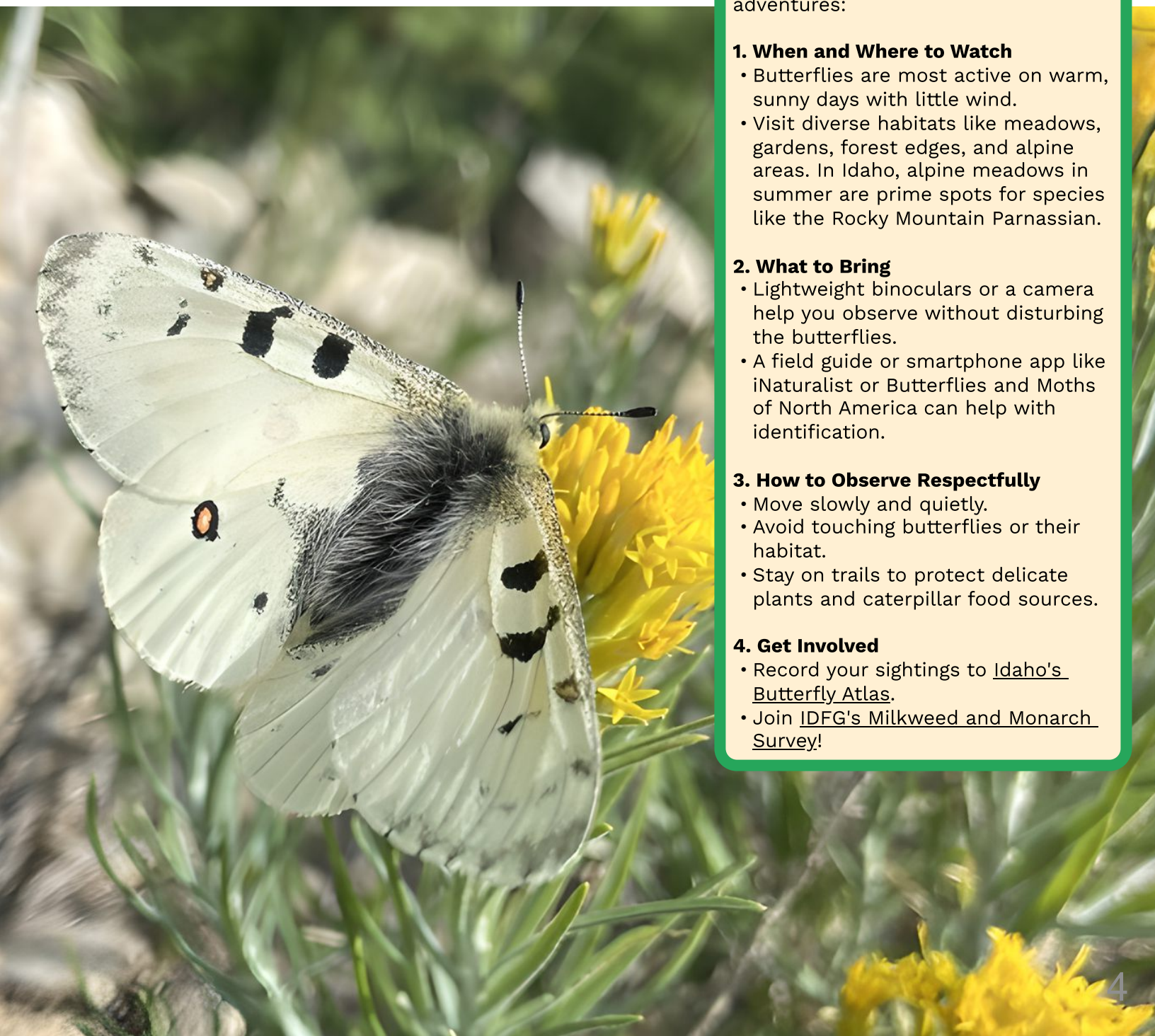
Conservation Status and Threats

The Rocky Mountain Parnassian is considered a species of greatest information need in Idaho, meaning not much is known about its population or range. Because it lives in high mountain areas, it's especially sensitive to changes in the environment:

- Climate change could reduce or shift the butterfly's habitat as temperatures increase.
- Recreational impacts such as hiking and off-trail travel can disturb fragile alpine vegetation.
- Habitat fragmentation from development or infrastructure projects may isolate populations.

To spot these elusive butterflies, head to high mountain meadows in the summer, especially on sunny, calm days. You can help protect their habitat by supporting conservation efforts and sticking to trails when you explore.

PHOTO: CC-BY-NC by wschenck on iNaturalist



Butterfly Watching — Tips

Butterfly watching is a rewarding way to connect with nature and appreciate the delicate beauty of these colorful insects. Here's how to get started and make the most of your butterfly adventures:

1. When and Where to Watch

- Butterflies are most active on warm, sunny days with little wind.
- Visit diverse habitats like meadows, gardens, forest edges, and alpine areas. In Idaho, alpine meadows in summer are prime spots for species like the Rocky Mountain Parnassian.

2. What to Bring

- Lightweight binoculars or a camera help you observe without disturbing the butterflies.
- A field guide or smartphone app like iNaturalist or Butterflies and Moths of North America can help with identification.

3. How to Observe Respectfully

- Move slowly and quietly.
- Avoid touching butterflies or their habitat.
- Stay on trails to protect delicate plants and caterpillar food sources.

4. Get Involved

- Record your sightings to Idaho's Butterfly Atlas.
- Join IDFG's Milkweed and Monarch Survey!

Dragons and Damsels

A Closer Look at Life on the Wing

PHOTO: Bluet species/CC BY-NC-SA 2.0 by Jocie SF

Living double lives above and below the surface

Dragonflies and damselflies might look delicate as they zip over lakes and marshes, but don't let that fool you. These insects belong to the ancient and highly skilled predator group known as *Odonata*, a name that means "toothed," referring to their sharp jaws. Idaho hosts 67 species of these interesting insects. You'll spot them near ponds, streams, and wetlands. They play a crucial role in controlling mosquitoes and serve as food for birds, fish, and frogs. Like all insects, dragonflies and damselflies have six jointed legs, a segmented body with three main parts (head, thorax, and abdomen) and a pair of antennae. But several features set them apart from other bugs:

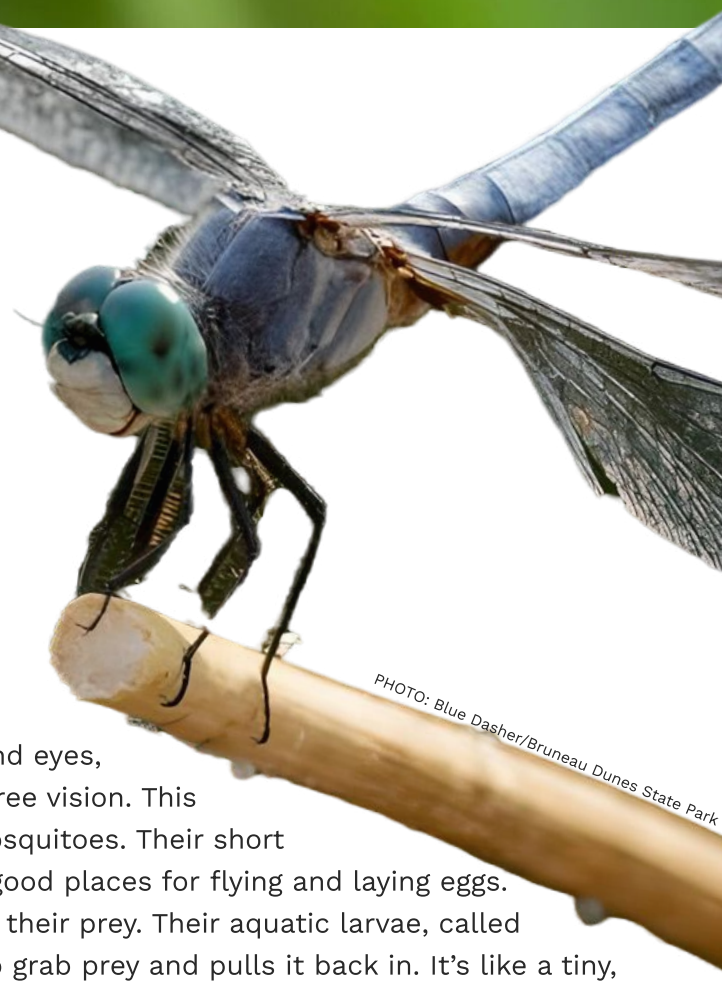
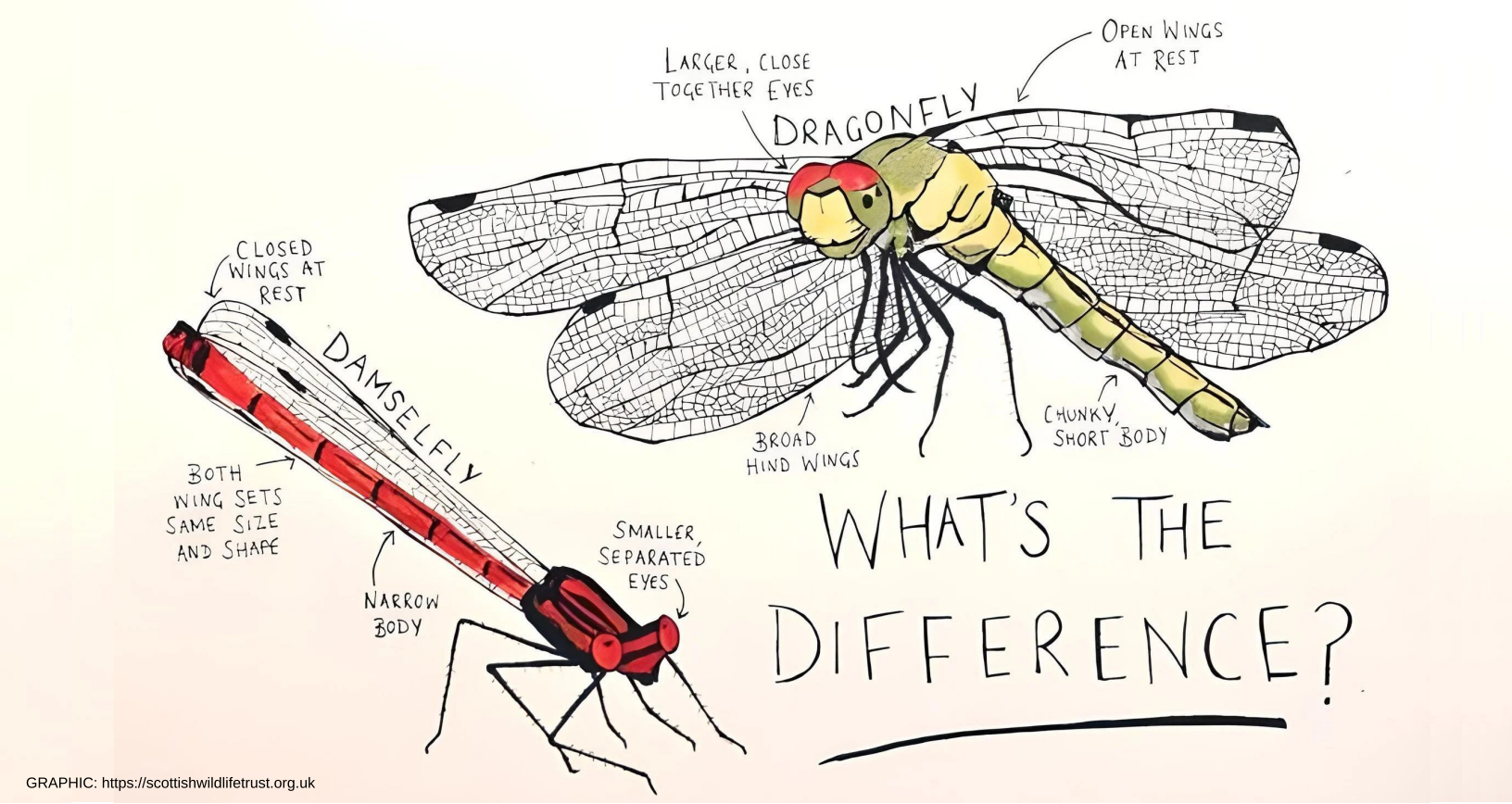


PHOTO: Blue Dasher/Bruneau Dunes State Park

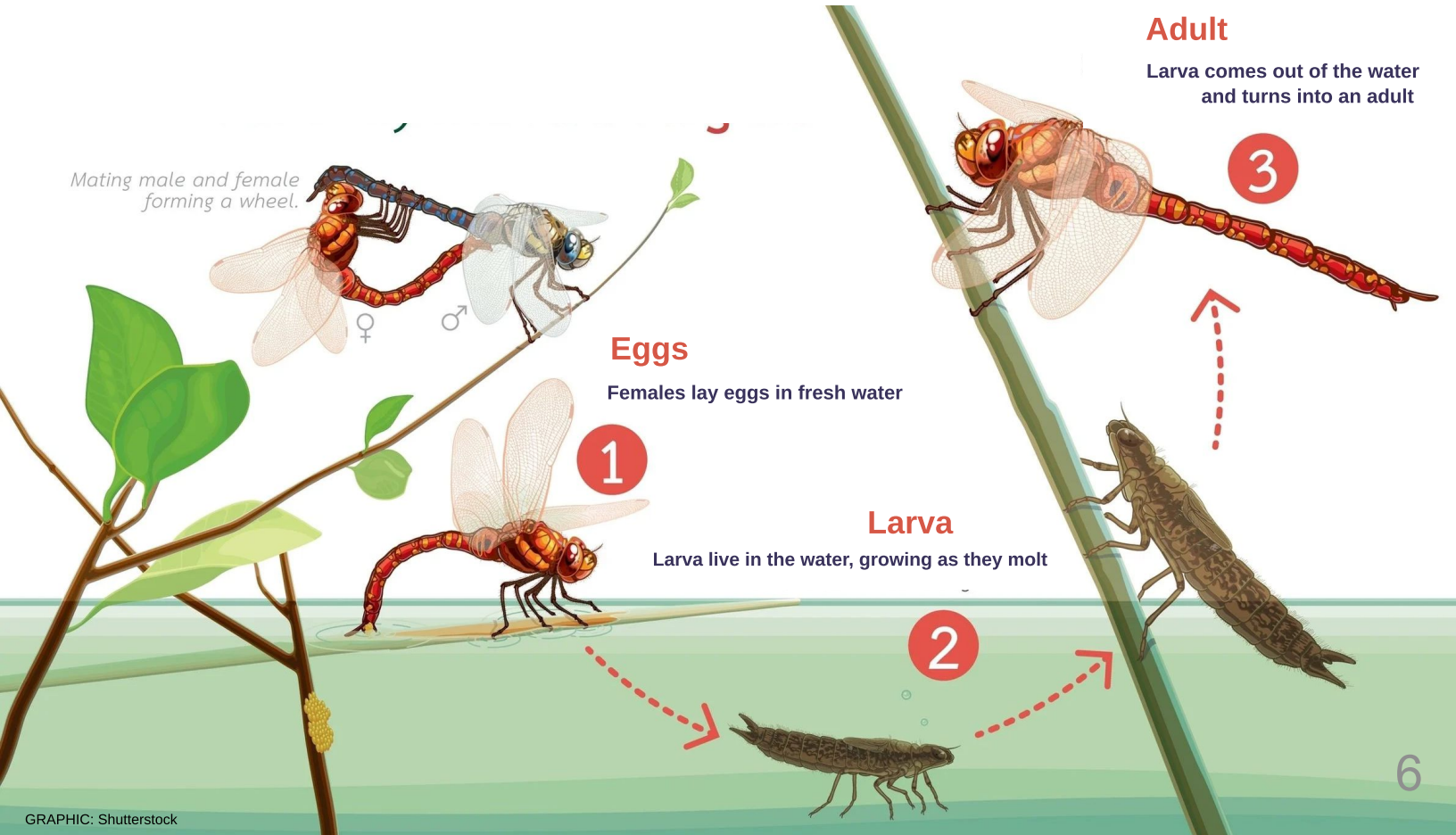
- **Head and Eyes**: Their most striking trait is their huge compound eyes, which cover most of their head and give them nearly 360-degree vision. This incredible sight helps them spot and chase down prey like mosquitoes. Their short antennae help sense wind and temperature, guiding them to good places for flying and laying eggs.
- **Mouthparts**: Adult dragonflies have strong mandibles to chew their prey. Their aquatic larvae, called naiads, have a unique extendable lower jaw that shoots out to grab prey and pulls it back in. It's like a tiny, hooked fishing line for ambushing underwater snacks.
- **Thorax and Wings**: The thorax is packed with powerful flight muscles and is where their legs and wings attach. Both dragonflies and damselflies have four transparent wings, but you can tell them apart by how they rest. Dragonflies hold their wings out flat, with front and hind wings shaped differently. Damselflies fold their wings neatly together above their body, and their wings are more similar in shape. Both use their front legs to form a "basket" to scoop up prey midair.
- **Abdomen and Reproduction**: Both dragonflies and damselflies have long, slender abdomens that assist with balance during flight. At the tip of the female's abdomen is an ovipositor, used for laying eggs in or near water.



GRAPHIC: https://scottishwildlifetrust.org.uk

FORM, FUNCTION, AND FLIGHT

Top: They may look alike, but dragonflies and damselflies have key differences. Dragonflies rest with their wings spread out and have thicker bodies, while damselflies fold their wings when resting and have slimmer, more delicate builds. Both are expert fliers, each with their own flying style. **Bottom**: Dragonflies and damselflies go through a dramatic transformation in just three stages. (1) Females lay their eggs in freshwater, where they hatch into aquatic larvae. (2) These larvae are fierce underwater hunters and shed their skin several times as they grow. (3) When fully developed, the larva climbs out of the water and changes into a colorful, flying adult, ready to mate and begin the cycle again.



GRAPHIC: Shutterstock

Male dragonflies are territorial and often seen patrolling the same stretches of water, chasing off rivals—and sometimes even birds or humans that get too close. Females tend to hunt farther from water to avoid these confrontations, returning only when it's time to lay eggs.

One of Idaho's most notable species is the **Common Green Darner,** the state's largest dragonfly. With a wingspan reaching over three inches, it's also a long-distance migrant. Green darners arrive in Idaho in early summer after emerging from southern wetlands in the spring. Their offspring, in turn, migrate south in the fall, continuing a multi-generational migratory cycle.

Another common species, the **Western Meadowhawk**, is easy to identify thanks to the orange-brown band across its wings. Males are reddish brown, while females are green to golden brown. The genus name, Sympetrum, means "with rock," referencing their habit of basking on sun-warmed stones and perches.

Naiads, the aquatic immature stage of dragonflies and damselflies, live in mud and debris at the bottom of ponds and lakes, where they ambush prey. Some species, such as the **Pale Snaketail**, are adapted to live in colder, fast-moving streams. Their naiads burrow into sand or mud to avoid being swept away and use jet propulsion to breathe, drawing water in and out of their bodies over internal gills. To reduce the risk of predation, many dragonfly naiads emerge from the water at night to molt into their adult forms. Some will even crawl far from the shoreline before making the transition.

PHOTO: Public Domain

Idaho is a great place to see dragonflies and damselflies in action. Whether you're exploring a mountain stream or walking by a pond in your neighborhood, you'll probably spot these fast, skilled fliers. If you watch closely, you'll see a powerful predator that's been around for millions of years.

You don't need to be an expert to start identifying them. The iNaturalist Odonata Idaho project offers photos, range maps, and a full list of species found in the state. Odonata Central is another excellent tool, with identification resources and species data from North and South America.

If you love spending time outside, consider sharing what you see. By uploading photos to iNaturalist or logging your sightings on Odonata Central, you'll contribute valuable data that helps biologists monitor and protect these fascinating insects.

From top to bottom: A Common Green Darner, Idaho's largest dragonfly and a long-distance migrant that travels hundreds of miles between seasonal habitats; a male Western Meadowhawk, easily identified by its reddish body and amber wing markings, basking on a sun-warmed perch; and the Pale Snaketail, adapted for life in cold, fast-moving streams. PHOTOS 1 & 2: Public Domain; PHOTO 3: CC BY-NC-ND by Jim Johnson.


The best part
of wildlife viewing.
IDAHO BIRDING TRAIL
idahobirdingtrail.com

Idaho Birding Trail

Sand Creek

Wildlife Management Area

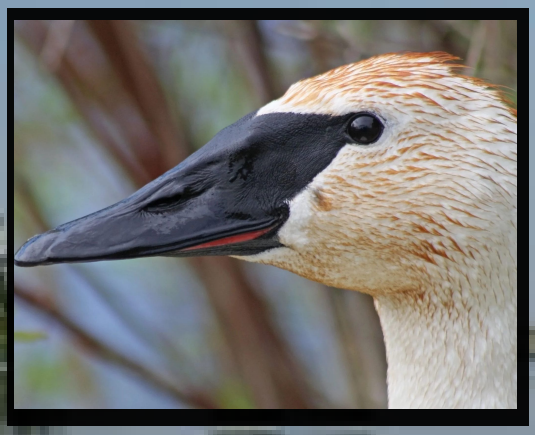
Sand Creek Wildlife Management Area (WMA), located in eastern Idaho near St. Anthony, offers outstanding wildlife viewing opportunities year-round. The WMA spans over 31,000 acres of diverse habitat, including sagebrush steppe, wetlands, riparian areas, and sand dunes, making it a hotspot for both resident and migratory wildlife.

Sand Creek is one of the most important wintering areas for Trumpeter Swans in the Greater Yellowstone region. From late fall through early spring, they can be observed on open water, along with Tundra Swans, Canada Geese, and a variety of ducks.

The WMA also provides critical winter range for elk, moose, and mule deer. In winter, large herds of elk are often visible from public access roads, especially where snow pushes them into open areas to forage.

The open sagebrush and grasslands are home to Northern Harriers, Red-tailed Hawks, Golden Eagles, and occasional Prairie Falcons. Sharp-tailed Grouse and Greater Sage-Grouse inhabit the area as well, with early spring offering a chance to witness their lekking displays.

The nearby St. Anthony Sand Dunes attract both wildlife and recreationists. Although heavily used by off-road vehicles, quieter areas near the dunes support species like Long-billed Curlews and Horned Larks in spring and summer.



Summer in Bloom

Wildflowers of the Idaho Backcountry

PHOTO: Sagebrush buttercup; Public Domain

Short Season, Lasting Impact

Silver Lupine in an exemplary alpine plant community on Sheep Mountain, Idaho. PHOTO: Bob Wick/BLM

Each summer, for just a few weeks, Idaho's landscapes shift. Meadows open up, ridgelines soften with color, and the ground seems to wake up all at once. Wildflowers appear in waves, responding to snowmelt, elevation, and temperature, offering one of the most striking seasonal changes in the West.

Idaho's geography, ranging from high desert to subalpine basins, supports a remarkable variety of native flowering plants. In the lower elevations of the Snake River Plain, you'll see early bloomers like Arrowleaf Balsamroot and Sego Lilies pushing through dry soil by late spring. These hardy plants are built for drought, with deep taproots and waxy leaves that hold moisture.

By June and July, higher elevations take the lead. Hikers heading into the Sawtooths, Bitterroots, or the backcountry of the Owyhees will find a changing palette:

- Silver Lupines form dense clusters, supporting bees and butterflies with their nectar-rich flowers.
- Shooting Stars and Elephanthead Lousewort favor wet areas like seeps and alpine bogs.
- And tucked among scree and talus, alpine specialists like Sky Pilot and Parry's Primrose bloom in harsh, wind-exposed environments where few other plants can survive.

These plants aren't just seasonal decoration, they play key roles in Idaho's ecosystems. They support pollinators, stabilize soils, and provide food for insects, birds, and mammals. Many wildflowers have also adapted to very specific conditions, making them vulnerable to changes in snowpack, fire regimes, or invasive species.

When and Where to Look:

- **May–June**: Lower elevations around the Boise Foothills, Camas Prairie, and Hell's Canyon.
- **Late June–July**: Mid-elevation meadows around places like Stanley, Harriman State Park, and Sand Creek WMA.
- **July–August**: High alpine basins in the Lost River Range, Pioneer Mountains, and Selkirks.

Viewing Tips:

- Go early or late in the day for the best lighting (and cooler temperatures).
- Use apps like iNaturalist to learn what you're seeing and contribute to community science.
- Stay on trail. Many alpine wildflowers are extremely slow-growing and easily damaged by foot traffic.
- Don't pick them. Even common flowers are important for pollinators and future seed production.

Idaho's wildflower season is short, shaped by snowpack and elevation. Some years are exceptional; others more subdued. But each summer offers a chance to witness a quiet, visually striking part of the state's biodiversity, one that connects directly to water, soil, climate, and time.

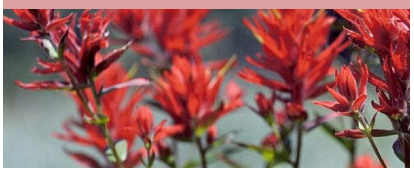
Arrowleaf Balsamroot

Bright yellow flowers with arrow-shaped leaves. Blooms early in dry, open areas.

Christ's Paintbrush

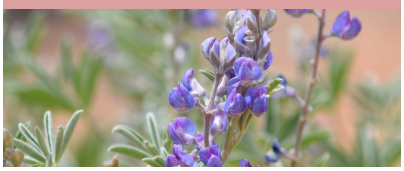
Species of Greatest Conservation Need

Showy red-orange bracts. Often parasitic on nearby plants' roots.



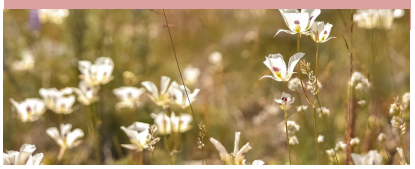
Silver Lupine

Tall, spiky blooms of silvery-blue to violet-pea-like flowers. Common in meadows and sagebrush slopes.



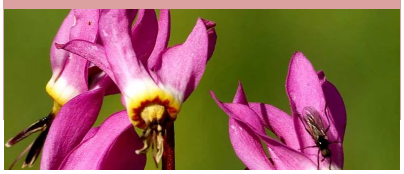
Sego Lily

White petals with a purple and yellow center. Grows in dry, rocky soil.



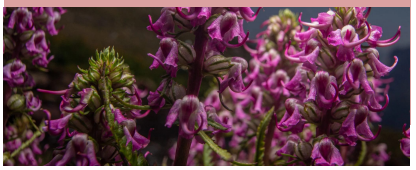
Shooting Star

Nodding pink or magenta flowers with swept-back petals. Prefers moist habitats.



Elephanthead Lousewort

Purple flowers shaped like tiny elephant heads. Found in high-elevation wetlands.

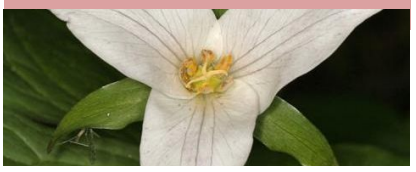


Western Blueflax

Pale blue, five-petaled flowers that bloom early in summer. Delicate and drought-tolerant.

Idaho Trillium

Also called "Wake-Robin," three-petaled blossoms in shady streambanks during early spring.



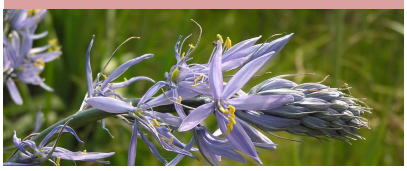
CULTURAL CONNECTIONS

Camas Lily and **Syringa** are more than just beautiful wildflowers, they hold important cultural roles in Idaho.

Camas Lily bulbs were a vital food for Native tribes like the Nez Perce and Shoshone, traditionally pit-cooked to release their sweetness. Syringa, with its fragrant flowers and straight branches, was used for arrows, knitting needles, baskets, combs, and cradle hoods. Boiled in water, the branches made a tea to treat sore chests and skin rashes.

Camas Lily

Pale blue, five-petaled flowers that bloom early in summer. Delicate and drought-tolerant.



Syringa

Idaho's state flower, featuring clusters of white blossoms in late spring along forest edges.

Thank You

Thank you to those who made direct donations, purchased or renewed a wildlife license plate, or contributed to the Idaho Nongame Wildlife Fund when completing their taxes.

Your contribution provides important funding for wildlife and habitat conservation, research, and outreach in Idaho.

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