
NEWS FOR THE DEDICATED ZOOLOGIST

Featured Animal Variable Checkerspot

Though the appearance of the variable checkerspot is extremely well, variable, they all share similar adaptations for survival, depending on the environment they live in. Whether that's the alpine tundras of Alaska or the sagebrush flats of Wyoming, the high prairies of North and South Dakota, or the chaparrals of Baja California and Baja Mexico.

The variable checkerspot (*Euphydryas chalcedona*) is a species of butterfly belonging to the family *Nymphalidae*, or the brush-footed butterflies, which also happens to be the largest butterfly family. An interesting characteristic of brush-footed butterflies is that they appear to have only 4 legs. But wait! All insects have 6 legs, so what's the deal here? Butterflies in *Nymphalidae* really only use 4 of them for standing, and the other 2 have shrunk down in size. Why is this, you may ask. If you don't know already, butterflies (and moths) use their antennae and palpi, for smell. The legs can both taste and smell. According to *Scientific American*, it is thought that the two smaller legs in some species have evolved to become more sensitive to these senses.

Variable checkerspots begin life as an egg, laid in large clusters by the female on the underside of a leaf. After the eggs hatch, the caterpillars will engage in group feeding, consuming the leaves, flowers, and bracts of the host plant, while still remaining in a secure "nest" made of silk. After that, the caterpillar will go dormant in leaf litter or under rocks, awaiting late January to mid-March, when the temperature will be favorable again.

Variable checkerspots are "promoted" to the pupa state from early to mid-April, after which¹ they become adults and begin their first flight, usually from April to June in California. Currently, they are a common sight, so have some native plants ready for when they stop by!



Wildlife at the Los Angeles River? *Hmmm...*

Though this question may sound a bit far fetched, there is a lot more to the Los Angeles River that you may realize. For starters, the L.A. River is paved with concrete in most sections, making it harder for plants to take root and start food webs. The river is always visibly polluted with trash, and who knows what else chemical wise. Despite all this, I can guarantee you, there is life here!

Birds, who are free to move around and escape the river if necessary, are almost guaranteed at every trip to the Los Angeles River. Whether that be great blue herons, snowy egrets, black-crowned night-herons, or black necked stilts, you'll just have to see for your self! These birds, and many more, enjoy searching for and eating algae that may grow on the concreted river bottom. When it's time to move on, they just fly away- and let me tell you, there's something about seeing a great blue heron fly that's just truly magnificent!

When I traveled to Glendale Narrows Riverwalk, a segment of the L.A. River, for my science fair project last year, I didn't know how much life I would find. I was pleased to know that lots of aquatic macroinvertebrates called that particular part of the river home. Not long after I began panning for macroinvertebrate "gold", I found water boatmen, small mayflies, aquatic moths, pouch snails, non-biting midges, black flies, scuds, eastern mud snails, and more! And that was a good thing, because I needed data for my project!

Backyard Sightings

Me, California

- Variable checkerspot
- Striped lynx spider
- Cat-faced orb-weaver
- Woodlouse spider
- Green lynx
- Dessert cottontail
- Western tense lizard
- California ground squirrel
- Bobcat
- Black-headed grosbeak
- American crow
- Common raven
- Mourning dove
- Northern mockingbird
- Greater bee fly
- Cabbage white
- California towhee
- House finch

Join the Adventure at:

<https://forms.gle/qnM8fyGatc6wP8j8A>

National Park Spotlight Yosemite National Park

Maybe you're one of the four million people that visit Yosemite National Park each year. Maybe you know of Yosemite's gorgeous landscapes, seasons, indigenous peoples, and wildlife.

Established on October 1, 1890 through a partnership between famed American naturalist John Muir and president Abraham Lincoln, as well as Theodore Roosevelt, who added land to the park later. It is now famous for its iconic mountains, such as El Capitan and Half Dome, as well as its wildflower meadows, waterfalls, valleys, and sequoia tree groves. Yosemite is called home by some 400 vertebrate species, such as black bear, Sierra Nevada bighorn sheep, Sierra newt, Yosemite toad, American dipper, California spotted owl, various trout, and Sierra fence lizards, as well as countless invertebrate species.

Interesting Reads

The Nature Conservancy's *Let's Talk Climate* How to guide

https://support.nature.org/images/PageBuilder/supporter/LetsTalkClimate_eBook.pdf

Audubon for Kids!

<https://www.audubon.org/get-outside/activities/audubon-for-kids>

The Virtual Fossil Museum

<http://www.fossilmuseum.net/>

Don't Miss:

National Geographic's Mountain Gorillas' Survival: Dian Fossey's Legacy Lives On Short Film Showcase

<https://www.youtube.com/watch?v=CWnk6PTsZNo>

Games

Animal Name Unscramble

*Note: Animal names are not species specific, but are more of a generic title.
Names are one word long.
Answers on the bottom of page.

1. IGRTE _____
2. EUIPNNG _____
3. AMLOIRDAL _____
4. DECROCIOL _____
5. YOPTNH _____
6. NAALESRADM _____
7. WLOF _____
8. ARRTPO _____
9. UDAYLBG _____
10. HFPOSITRRA _____
11. AZLELEG _____
12. NEALHPTE _____
13. BAOBONO _____
14. REUKYT _____
15. WSAN _____
16. NAUFGELIOW _____
17. IMGMRUIDHB _____
18. RSKHA _____
19. ELE _____
20. ANLSI _____

- | | | | |
|-----------------|----------------|--------------|-----------------|
| 1. Tiger | 2. Penguin | 3. Armadillo | 4. Crocodile |
| 5. Python | 6. Salamander | 7. Wolf | 8. Parrot |
| 9. Ladybug | 10. Parrotfish | 11. Gazelle | 12. Elephant |
| 13. Baboon | 14. Turkey | 15. Swan | 16. Guinea fowl |
| 17. Hummingbird | 18. Shark | 19. Eel | 20. Snail |

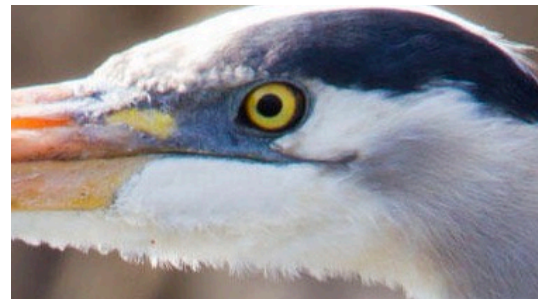
Nature Trivia

Which of these animals are native to California?

- A. California ground squirrel
- B. Red chevroned parrot
- C. Mute swan
- D. Red-eared slider
- E. Ten-lined June beetle



Find the answer on the bottom of the page!



What animal is this?

See bottom of page for answer.

Get ready for quarantine issue #4 of *News For the Dedicated Zoologist!*

New Podcast Series coming soon!

Stay tuned and stay safe!

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Nature trivia- A. California ground Squirrel
 What animal is this?- Great Blue Heron
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