

Department of Fish and Game

Conservation Education
1416 Ninth Street, Room 1240
Sacramento, CA 95814
(916) 653-6420

www.dfg.ca.gov

articles by Bob Garrison, coordinator of the Department's Interpretive Services

Watchable Wildlife -- Birds of Prey

Viewing birds of prey can be as simple as watching roadside fence posts and power poles for red-tailed hawks and kestrels. With a bit more effort and a little studying, you can easily spot five to 10 species of raptors on a day's excursion.

The first step is investing in a bird field guide and reading about the habits of each bird of prey found in the area you plan to visit. The next step is to search out the natural habitats where the birds reside. Start by visiting a few of the watchable wildlife locations listed below for guaranteed success. Once you arrive, your bird guide is a must for identifying one species from the next. With a little practice, you will be able to identify a raptor simply by its shape, location, and behaviors.



VIEWING TIPS

- Use binoculars to get a close view. Do not get close enough to disturb the birds.
- Buy a good quality bird field guide which provides natural history information, range maps and color drawings of the birds of your area.
- Think like a mouse. You will find raptors where their prey is located. Unplowed fields with nearby perches are ideal locations to view raptors.
- Watch the skies in open areas for soaring birds of prey. To save energy, raptors glide around on uprising air currents to gain height before moving to a different area.
- Scan solitary power poles, fence posts or trees for perching birds of prey.
- In areas with cliff, barns or tall trees, look for the whitewashed droppings of hawks or the regurgitated pellets of owls. These telltale markings will often lead you to a raptor's favorite perch. Some of the more reclusive birds of prey are hard to spot any other way.

A SELECTION OF BIRD FIELD GUIDES

A good quality field guide is a must for beginning and advanced wildlife watchers. Every birder has a favorite guide, but here are three excellent guides to choose from. Most large book stores stock all three, so take a look at each before you select one.

- Field Guide to the Birds of North America - National Geographic, \$21.00
- Birds of North America - Robbin, Bruun and Zim, \$11.95
- Field Guide to Western Birds - Peterson, \$16.95

Watchable Wildlife -- Tide Pools

Cold, nutrient-rich waters and rocky shorelines provide the perfect habitat for hundreds of species of plants, from microscopic diatoms to huge seaweeds. The plants in turn, support a multitude of wildlife normally hidden beneath the waves. At first glance, the wave-swept rocks may seem void of life, but the rocky pools exposed only at the lowest tides contain a rich stew of plants and animals plastered so thickly together that very little of the rocks show. An amazing feat considering the harshness of this wave-battered environment.

Imagine the challenge of surviving surging waves, scouring sand and the drying sun at low tide. While you're trying to keep from getting bashed about in the surf, you must hunt for food, hide from enemies and reproduce. As you think of how you would survive the elements, consider how each tide pool animal has adapted to these harsh conditions. Some species like the barnacles and anemones permanently attach themselves to the rocks and wait for the waves to carry them food. Snails and seastars clamp down on the rocks during low tides and crashing waves, but move about in search of food at high tide. Soft-bodied sea slugs and fish tend to be the most active hunters and retreat to protected coves and deep water during storms and low tides. Part of the fun of exploring tide pools comes from trying to guess why the animals look and act as they do. Nowhere else on earth can you see such diverse methods of responding to this rugged world.

To be a good tide pooler, you must also be a good detective. On land, it's easy to tell a plant from an animal, or an animal from a rock. Not so in the tide pools, especially at low tide when animals clamp down to keep from drying. Many species are masters of disguise, using camouflage colors and shapes to hide in the pools. For those willing to poke and probe in the pools at low tide, a world of bizarre animals in a vast array of colors, textures and shapes awaits you.

TIPS FOR TIDE POOL VIEWING

Tide pool viewing is not for the faint of heart. But with a willingness to get wet, some common-sense safety measures and a spirit of adventure, you will be rewarded with hours of wildlife viewing pleasure.

- Pick up a Field Guide -- many good guides are available, but avoid the most basic guides that tend to focus on east coast species. *Pacific Intertidal Life*, by Ron Russo and Pam Olhausen is a great pocket guide for under five dollars.
- Low Tides Mean High Times -- plan your trip to coincide with the lowest possible tides, generally those that occur near the times of a full or new moon. Pick up a tide chart at a sporting goods store and look for minus tides for the best viewing opportunities.
- Stick to the Pools -- the best viewing occurs in the lowest exposed tide pools. Pass up the animals exposed to the air and watch the deep pools where animals will be feeding.
- Look, Don't Touch and Pry -- gently push aside floating seaweed to look beneath, but leave the animals alone. Quietly watch the pool for movements to discover crabs and fish that hide from view when they are disturbed.
- Tread Lightly -- stay out of the pools and carefully place each footstep to avoid stepping on sea life. Animals that can withstand crashing waves are easily crushed underfoot.
- Collect Only Memories -- leave everything where you find it. Even the smallest shell will be used by young hermit crabs. Remember most tide pool animals are protected by strictly enforced laws to conserve this unique natural resource.

SAFETY FIRST

1. Wear long pants and old tennis shoes that have good treads and cover your entire foot. Spiny sea urchins and sharp barnacles can easily cut exposed skin.
 2. Walk with extreme care on the slippery rocks. Walk between rocks (don't rock hop) and stay off slippery seaweed.
 3. Don't turn your back on the ocean. Occasional large waves can easily sweep the unwary into the water.
 4. When exploring the tide pools at low tide, never let the incoming tide cut off your route back to shore.
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Watchable Wildlife – Butterflies

Bigger isn't always better. Though we often forget about insects and other smaller species when we think about wildlife, butterflies and moths display some of the brightest colors and most interesting behaviors of any group of animals. They can be found throughout the state and spring is prime butterfly season. And where do you look to find butterflies? Why on flowers of course.

From an evolutionary standpoint, butterflies and flowers grew up together. During the Cretaceous period, 130 million years ago, flowering plants began to dominate the land. As new plant species evolved, butterflies, bees and many other insect species also evolved to take advantage of this new source of food. Today many flowering plants and insects are so closely linked that one cannot survive without the other.

Adult butterflies drink nectar from flowers through a straw-like mouth coiled tight when they are not feeding. Although adults may drink from a wide variety of flowers, caterpillars usually must feed on specific native plants. You can find butterflies in ornamental gardens, but visit native plant gardens or natural areas to find the greatest numbers and varieties.

This time of year, many native plants are in full bloom. However, weather conditions may speed up or slow down the flowering season. Your best bet for finding flowers and the butterflies they attract is by contacting local native plant groups or calling flower hotlines which list the best locations to view native flowers at the time you call. Also as a general rule, as summer progresses, the blooming location rises in elevation; starting along the coast and in the deserts and valleys in February and extending through August in the mountains.



VIEWING TIPS

Conservation First! -- do not collect or handle butterflies. Watching them in their natural habitat allows you to study their behaviors and actions undisturbed.

Try Binoculars -- Getting close to butterflies is very difficult. Butterflies have compound eyes which are ideal for spotting the movement of predators. Binoculars are great for getting a close-up view without scaring the butterfly off.

Caterpillars Call the Shots -- The best bet for finding adult butterflies is to find the plants they lay their eggs on. Caterpillars generally must feed on one type of plant so the adults will be attracted to areas where that plant grows. Purchase a butterfly field guide to learn which butterflies and plants are linked.

Carry a Magnifying Glass -- While watching butterflies, you often find other fascinating insects, small animals and flowers. A magnifying glass or hand lens will reveal colors and patterns you never dreamed existed in the natural world.

Forget the Butterflies and Watch the Flowers -- Butterflies can be even more illusive than larger species of wildlife. Insect populations can boom or bust depending on the weather, so take along a plant book and enjoy the flowers.

Watchable Wildlife – BATS

(Bob Garrison and Jim Metcalf - student intern from Beloit College in Wisconsin.)

Bat watching is taking off across the country. In downtown Austin, Texas hundreds of people gather each summer evening to watch thousands of Mexican free-tailed bats leave their day roosts under a bridge to hunt for insects. Wildlife viewers from around the world visit Bracken Cave in Texas to watch over 20 million free-tailed bats rise in huge columns at dusk in pursuit of over 250,000 pounds of insects each night.

Darkness offers a unique set of challenges that face both us as wildlife viewers and the animals that are active at night. Bats have conquered the dark through echolocation. Although bats can see quite well, they navigate and find food by emitting high-pitched sound waves that bounce off objects and back to the bats as they fly. A bat's hearing is so sensitive that not only can they find tiny insects using echolocation, but they can tell if it's a favorite variety of moth or beetle. Many insects can also hear the high-pitched calls of bats and swiftly take evasive flights to avoid being eaten.



TIPS FOR VIEWING BATS

The bat's nocturnal lifestyle makes them one of the most elusive of California's watchable wildlife species. You may not find bats on your first attempt, but follow these tips to improve your chances:

- Dawn and dusk are the best times to spot bats as they begin and end their night flights
- Pick an open spot where you can see bats silhouetted against the lighter sky
- Look for areas where night-flying insects abound; areas near water are the best
- Flood lights and street lights that attract insects may also attract bats
- when you find bats, listen to their clicks and squeaks so you can follow their flight paths after dark

- DO NOT try to find day roosts or watch bats during the day. Bats may abandon roosts if they are disturbed in any way.
- DO NOT disturb hibernating bats in the winter. One disturbance can cause a bat to use up to 60 days of fat reserves needed over their winter hibernation.
