

Explore the unseen Elkhorn Slough

By Becky Christensen

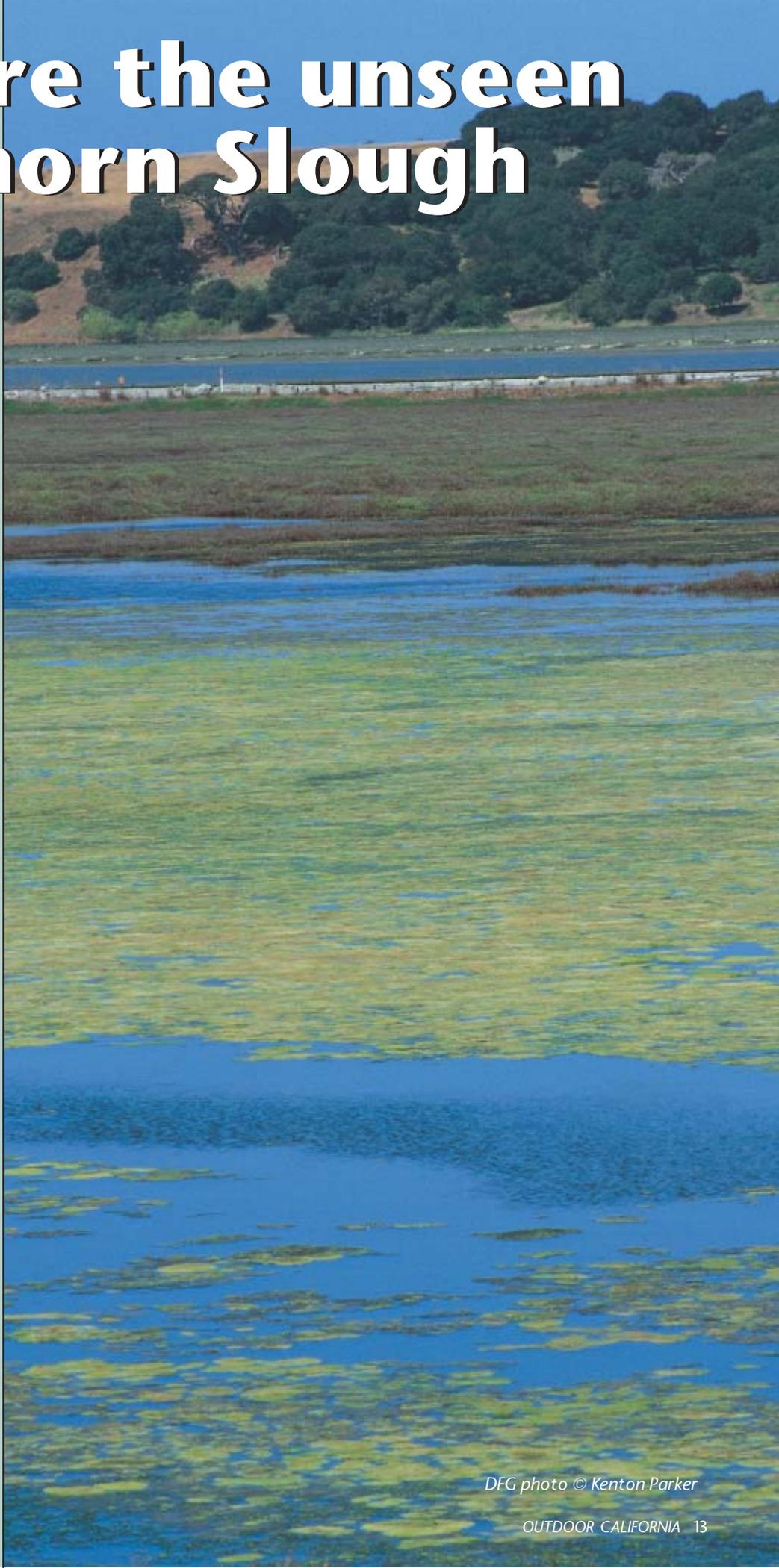
Estuaries: a nursery ground, a resting place, a smorgasbord; where rivers meet the sea. If you're a nature enthusiast you've probably heard this description before. But what *exactly* does it mean? And what in the world is a *slough* anyway? A visit to the Elkhorn Slough National Estuarine Research Reserve (ESNERR) is a great way to find all this out, and much more.

Elkhorn Slough is a seven-mile arm of the Monterey Bay located half way between the cities of Santa Cruz and Monterey. This arm has a bend in it as it extends inland, and at the "elbow" lies the ESNERR. The ESNERR is owned and managed by the California Department of Fish and Game (DFG) and it operates in partnership with the federal National Oceanic and Atmospheric Administration and the local, non-profit Elkhorn Slough Foundation. It is one of 22 national estuarine research reserves around the country that serve as representative estuaries for research, education and habitat stewardship.

The 1,400 acres that comprise the ESNERR include salt marsh, mud flat, freshwater pond, oak woodland, and grassland habitats. A stroll on any one of the three loop trails reveals a variety of both wetland and upland wildlife. It is not uncommon for a black-tailed deer to be foraging in the oaks while a grey smoothhound shark is gliding through the backwater shallows just below in search of a meal of mud crabs. Trails range in length from just under a mile to a little over two miles. Along the way visitors will find marsh boardwalks, a wildlife viewing blind, and scenic overlooks to enhance their wildlife watching.

Elkhorn Slough is renowned for its outstanding birding opportunities especially during fall, winter, and spring. But before you hike, you will want to stop in to the ESNERR's newly renovated visitor center to see *The Unseen Slough!*

Mats of green algae blanket the shallow waters of the North Marsh.



This new, award winning, exhibit will open your eyes to things you probably never knew existed. The exhibit won first place in the National Association for Interpretation (NAI) 1998 Media Award Competition in the Interior Exhibit Category. NAI is a professional, non-formal education organization with 3,600 members in 50 states and 22 countries.

Much of the slough life occurs in places that are difficult for humans to reach. A rich array of creatures lie hidden in the mud, among the marsh plants, or under water. And for every creature that can be dug up, scooped up or netted, there are literally millions more that are too small to see with the naked eye. These unseen worlds are both fascinating to reveal and vital to the health of the ecosystem. While many people focus their attention on larger animals such as whales, seals, otters, and birds (known fondly in naturalist circles as "charismatic megafauna"), the ESNERR has focused visitor center exhibits on the less glamorous, often overlooked "unappreciated demifauna." The aim is to glorify the hidden world that fuels the food chain upon which the more conspicuous players rely. In short, without plankton, we would have no sea otters.

... and by the way, a *slough* (rhymes with blue) is a slow-moving body of water with muddy banks.

Becky Christensen is the ESNERR manager. Kenton Parker, DFG interpreter, contributed.

Educational opportunities



DFG photo © Kenton Parker

Each year, about 10,000 students experience this outdoor classroom as part of a school field trip. Teachers wanting to be an Elkhorn Slough naturalist must attend a two-day workshop. Afterward, they can choose to do a variety of field activities from plankton sampling to bird monitoring. Another targeted audience for education is the coastal decision makers of the region. Local, state, and federal planners and regulators as well as elected officials who make decisions that affect Elkhorn Slough may take a series of workshops on the slough and its watershed. The workshops get the decision makers out into the field and to keep them current on important Elkhorn Slough issues. For families, friends, and individuals, there are guided walks every weekend, and several exciting special events throughout the year.

Projects restore and enhance area

Much of the ESNERR has been heavily impacted by decades of human use. The ESNERR has been the site of two turn-of-the-century duck hunting clubs, and was an active dairy from the 1920s through the mid-1950s. These and other uses changed the flow of tidal waters, the location of fresh water ponds, and the variety of vegetation throughout the ESNERR. As a result of these impacts, a large amount of habitat restoration is being done to make the land more usable for diverse native wildlife.



DFG photo © Kenton Parker

Visitors can tour a drop of water from the Elkhorn Slough through a video microscope. This polychaete (many bristled) worm larvae is one of the many creatures found in the microscopic world of plankton.

As a reminder of what the landscape used to look like, a variety of native plants are grown around the Visitor Center. Coast live oaks have been planted in areas once dominated by Australian eucalyptus trees. Eighteen wildlife drinking ponds, called "guzzlers", are maintained in order to provide fresh water where seeps and springs no longer flow. These and many other projects are necessary to enhance the ESNERR's value to wildlife.

Research means wiser decisions

Many unique research opportunities exist. Applied research by graduate students and professors is highly encouraged. At any given time, 30 or more research and monitoring projects are in progress. Researchers are currently looking at such things as competition between native and exotic species; the effects of agricultural and urban run-off on water quality; how and when shorebirds use the estuary; patterns and effects of salt marsh loss; and the feeding, movement, and growth of leopard sharks. The knowledge that is gained from this work



DFG photo © Kenton Parker

Boardwalks located on several of the trails at ESNERR give people and birds a unique vantage point.

is often used to help make management decisions for the estuary. The Visitor Center exhibits and docent-led tours

afford the people an opportunity to learn about current research activities and resource management concerns.

Elkhorn Slough National Estuarine Research Reserve Access Information

1700 Elkhorn Road
Watsonville, CA 95076
(831)728-2822
www.elkhornslough.org

Open

Wednesday - Sunday, 9:00 a.m. to 5:00 p.m.
Closed Monday and Tuesday.

Docent-led walks are available every Saturday and Sunday at 10:00 a.m. and 1:00 p.m.

Groups of 10 or more are encouraged to schedule a separate tour. Binoculars and bird books are available to borrow at no cost.

Visitor Center and Main Overlook are fully accessible.

Day Use Fee of \$2.50 per person ages 16 and older. Children under 16 are free.

No Reserve fee for those possessing a valid California hunting or fishing license.

Upcoming Special Events:

Mother's Day For All Species, May 9, 1999

Monterey Bay Bird Festival, October 2 and 3, 1999



Watching birds at the ESNERR.

DFG photo © Scott Hartley



Western sandpiper.

DFG photo © John Sorensen

Become a Volunteer!

Over 150 people of all ages and from different walks of life volunteer their time at the ESNERR. All volunteers complete a nine-week summer training

course that covers many aspects of ESNERR operations, and natural and cultural history. Once graduated, volunteers lead tours, host the Visitor

Center, assist with maintenance and restoration, aid researchers with field work, help with office work, and more. Call 831-728-2822 for more information.