How valuable is slough habitat?

It's often hard to measure the value of natural habitat.

That's true, in part, because of man's limited knowledge of nature's inner workings. We can really only guess about the greater effects of development, elimination of habitat or the extinction of a species.

It's also true because much of what people value about nature is intangible. Natural areas are attractive, relaxing, enjoyable, educational and, for some, even have spiritual and cultural importance.

For Patrick Orozco, an Ohlone Indian leader, the sloughs, and other aspects of the local natural landscape, are an integral part of the culture he and other Native Americans are trying to preserve.

"The animals (that live there) are related to our stories and to the people of the past," he said.

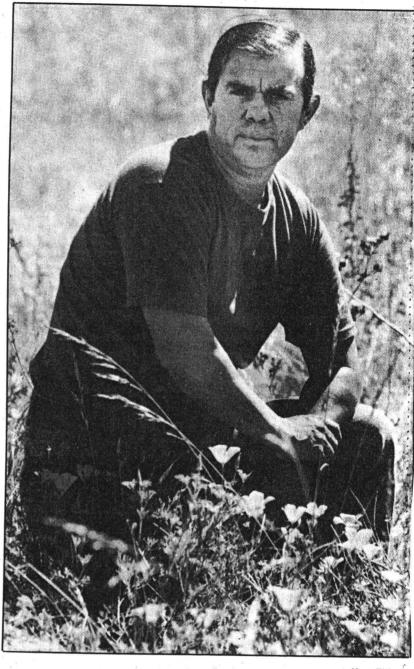
There are, however, some specific, tangible "services" sloughs, in general, provide to the environ-ment and to humans. Here is a short list:

 Food and habitat. Wetlands are considered the most productive of all habitats in terms of the amount of plants and animals they

Freshwater sloughs, like those in the Watsonville system, support more wildlife than saltwater sloughs, like Elkhorn Slough. Many species of waterfowl and both saltwater and freshwater fish require wetlands for breeding and nesting, including 20 percent of animals on the federal government's threatened or endangered

Many game animals also depend on wetlands. Wetlands along the West Coast are a crucial part of the Pacific Flyway, a migration route used by many species of birds as they travel between their winter and summer homes. The reduction of birds traveling the flyway has been attributed to loss of coastal land.

In Santa Cruz County, rare and endangered species, including the Santa Cruz long-toed and California tiger salamanders, have been linked to wetlands. Birds listed by the state as "species of special concern" live or hunt on the grasslands around the sloughs, and the endangered Santa Cruz tarplant grows in abundance on a slope near Struve Slough.



Kurt Ellison

For Native American Patrick Orozco, the sloughs are part of his heritage.

- Drainage. In some cases, wetlands can temporarily store runoff and slow the flow of water, reducing flood peaks and the frequency of flooding.
- Improvement of water quality. Wetlands, with their vegetation and relatively slow flow, retain pollutants from run-off and other waters running into them, thus protecting, to a certain degree, the waters the sloughs themselves run into. Some types of pollutants can be broken down by biochemical processes in the sloughs, others are buried in the slough mud or taken up in slough plants. In some
- areas, wetlands are being experimented with as a natural way of treating sewage effluents.
- Shoreline erosion control. Vegetation in wetlands near rivers, lakes and oceans can reduce erosion caused by wind, waves and flooding.
- Atmospheric functions. Some scientists believe that large wetlands can help moderate temperatures, provide a source of water to the atmosphere - helping to create rain - and release gases necessary to global atmospheric sta-

-Chela Zabin



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