Spot In. Science & Technology

CONSERVING THE DEPENDENCE OF A DEPENDENCE OF A

by Alan Ehrgott as told to Martina Deignan



Benchmark

What kind of work does a person do to protect a river?

PERSONAL NARRATIVE

SCIENCE & TECHNOLOGY

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The text is written in the first-person point of view (/).



The conclusion emphasizes why the event or time period is important to the writer. The text tells about the writer's actions, thoughts, and words during the event or time period.

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A CONSERVATIONIST IS BORN

A s a young boy, I always loved and appreciated the great outdoors. Some of my fondest memories include hiking in the San Gabriel Mountains in Southern California and seeing all kinds of wildlife. During college, I had a lifechanging experience. I hiked the Pacific Crest Trail from the Mexican border to the Columbia River Gorge. On that trek, I saw wildlife that I had never seen before. My curiosity about the natural world and wildlife grew more and more. So when I returned to college, I decided to study the **environment** and how to take care of it.

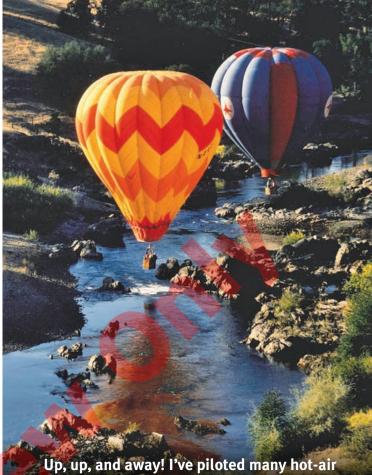


🔺 Alan Ehrgott



▲ The Pacific Crest Trail stretches from the Mexican border to the Canadian border. It is about 4,260 kilometers (2,650 miles) long and takes about five months to walk. After I graduated from college, I led wilderness tours in Alaska, Africa, and South America. I also worked as a rafting guide and a hot-air balloon pilot along the American River in California. It was on one of my hot-air balloon trips, floating over the river, that I realized the river's **watershed** needed to be protected.

From my special perch above the American River, I could see bulldozers revving up their engines and digging into the hillsides. I knew that the land was in danger. I realized then that I wanted to help preserve this special river and other places like it. I decided to become a **conservationist.** I would make it my job to protect Earth's water, soil, wildlife, and forests.



Up, up, and away! I've piloted many hot-ai balloon rides along the American River.

A watershed is an area of land that catches rain and snow and drains into a river or other body of water.



THE AMERICAN RIVER AND ITS HISTORY

The river I knew best was the American River in California. After becoming a conservationist, I worked for different environmental organizations. Then I founded the American River Conservancy in 1989 with a few of my friends. For almost thirty years, I have served as its executive director.

The American River begins in the high Sierra Nevada mountains in the Tahoe and El Dorado National Forests in Northern California.

American

River

The river diverges into three forks—the South Fork, Middle Fork, and North Fork—and flows through the Sierra foothills. Then the forks come together east of the city of Sacramento. The river, including its three forks, is about 370 kilometers (240 miles) long.

> Tahoe National Forest

Middle Fork

NorthFork

El Dorado National Forest

Los Angeles

Sacramento

California

The three forks of the American River flow westward from the mountains and join near Sacramento.

South Fork

The Miwok people lived along the American River in bark houses like this.



The Nisenan and Miwok

The American River was once home to different Native American groups, such as the Nisenan (NY-sihnin) and Miwok (MEE-wok). They lived peacefully along the banks of the river in small villages. The Nisenan and Miwok relied on the American River and the surrounding land for their survival. They deeply respected both the land and the water. The Nisenan and Miwok were mainly hunters and gatherers. They closely watched the seasons and knew when to fish for salmon or hunt for deer. They knew when the wild garlic and onions were ready to be harvested. They also knew when the acorns would fall. Acorn, a major food staple for the Nisenan and Miwok, was used in many foods they prepared. Today, descendants of the early Nisenan and Miwok still live in the area.

a Nisenan couple in 1905



The Gold Rush, 1848-1855

In 1848, gold was discovered in the American River by settlers, marking the beginning of the California gold rush. Thousands of miners flooded into the American River valley in search of more gold.

Many of the miners were called the forty-niners because 1849 was the year that most of them came to California. Americans traveled from all parts of California, down from Oregon, and across the plains from the East Coast. Gold seekers also came from other countries, such as China, Mexico, and Germany—all in search of instant wealth.

Many miners arrived in San Francisco, California, by boat. The population of San Francisco expanded rapidly during the gold rush.

From the Source

The Californian, a San Francisco– based journal, published the following on May 29, 1848:

"The whole country from San Francisco to Los Angeles, and from the sea shore to the base of the Sierra Nevada, resounds with the sordid cry of gold! GOLD!! GOLD!!! while the field is left half planted, the house half built, and everything neglected but the manufacture of shovels and pickaxes."



gold

During and after the 1850s, the mining continued, and more people moved to the region. Thousands of miners settled in the area. They moved out of their temporary tents along the rivers and into housing. Gold-mining companies were formed, and more jobs became available. Mining settlements and towns were established in the area, complete with banks, restaurants, and grocery stores.

During the early years of the gold rush, miners collected millions of ounces of gold from the American River. That gold is equal to billions in today's dollars. During this time, the Nisenan, Miwok, and other Native groups began to lose their land to these newcomers. Their way of life was drastically changed. Many Native Americans died from disease or conflict. Many were eventually driven out of the area by the gold miners.

CHAPTER 2

A RIVER ECOSYSTEM

have always felt that rivers are an important resource. They are beautiful bodies of water and fascinating **ecosystems**.

An ecosystem is all the living and nonliving things that interact in a given area. A river ecosystem consists of plants, like cattails and reeds, fish, snails, and crayfish, as well as the air, water, rocks, soil, and sand found in the area. All of these things interact in an ecosystem.

The living things in an ecosystem depend on one another to live. They could not survive without one another's help. They are firmly linked together in what we call a food web. A food web is the way in which energy moves from the sun throughout the living things in a community. **Nutrients** in a river support its ecosystem and food webs. Nutrients are supplied by a river's **headwaters**. The headwaters are the source of all rivers. Headwaters could be a lake or a few small streams that come together to form a larger body of water. The headwaters of a river are very important because they help keep a river's ecosystem healthy.

The different plants and animals in a river depend on one another as well as on the sun and water.

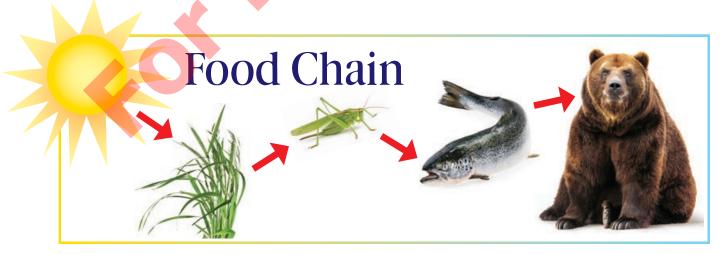
American River Ecosystem

The miners of the gold rush valued the American River for its gold. But to me, the plants and animals that inhabit the river are the real treasure. The links that connect each living and nonliving thing and help maintain the ecosystem's delicate balance are priceless.

For instance, plants grow in the nutrient-rich soil along the river's banks. They use the sun's energy to live and grow. The leaves from these plants fall into the river and may become food for insects. Then the insects become food for the Chinook salmon that swim in the river. A little later, a black bear might catch and eat the salmon. All those interacting living things depend on one another and their environment for survival. Trees are also important, rich resources that support life along the American River. I think about the Nisenan Indians and how they relied on acorns from the giant oaks for their food. Sturdy trees such as the oak and ponderosa pine provide safe homes for many of the mammals and insects along the river.

This oak tree, a favorite of mine, is about 450 years old.





▲ A food web is made up of many food chains. This food chain shows one way the sun's energy can move through living things in a river community.