

Are humans affecting the wildlife ecosystems here? If so, how and why?

The short answer is: yes, humans are affecting the ecosystems here. The longer answer follows...

I will start by saying that humans have been trying to make the earth a better place to live in ever since they were humans.

Palo Alto Open Space is comprised of many different ecosystems and habitat types; everything from salt water marshes, to creek beds, to grasslands, to high chaparral and oak woodlands. These areas have been heavily used by humans for many reasons, we have hunted, fished, grown crops and picked wild plants for food, we have harvested lumber to build homes and businesses, we have harvested salt from the bay. Recently we have begun to care for these lands instead of use them. The City of Palo Alto maintains about 4,000 acres as open space; it will always be available for human recreation and, with care, as habitat for many plants and animals.

3.7 million years ago *Australopithecus afarensis* (the earliest hominid ancestor to modern humans) left footprints in an ash bed in northeast Africa (our earliest affect on an ecosystem). 2 million years ago *Homo habilis* (probably our earliest "human" ancestors) was making stone blades and other simple tools. 1 million years ago humans began using fire. 10,000 years ago, somewhere in the Fertile Crescent of the Middle East, agriculture was born. Up to this point humans had been hunters and gatherers; following herds of prey animals or food plants as they migrated or changed seasonally. When we were able to have a sustained source of food we became able to stay in one place, to settle. The birth of agriculture brought on the birth of towns and cities and soon after civilization.

Animals, plants and people have coexisted on this planet for many, many years. As our population grows larger, we need more stuff: more land to live on, more land to grow crops on, more water to drink, more electricity to power our tools, more petroleum to power our cars, more salt for our food, more plastic wrap to protect our food, more batteries for our Game Boys. All these things come from some ecosystem, somewhere.

From our very earliest history we have been leaving our mark on the planet from tilled fields and our homes to toxic waste dumps and nuclear reactors. The marks we have left are neither good nor bad; they are simply the result of our presence.

There are about 6.6 billion people living on the earth, they eat a lot of food and use up a lot of natural resources. The easiest resource for most of us to get is water; imagine all the glasses of water we drink, and the water we use to wash their hands, to wash the food we cook, to bathe in, to flush toilets and all the other ways we use water. The average person in the United States uses about 66 gallons of water daily (what did you do with your 66 gallons of water today?). 2.5 percent of the water on earth is fresh, 70 percent of that is frozen, that means .007 % of the worlds water is available for consumption.

You can easily tell that if we are not careful about how we use water at some point we will need it and not be able to find it. The same thing applies to any resource; animal, vegetable or mineral.

As a race, humans are now beginning to think about what we leave behind for our descendants and are trying to balance our needs for resources with our desire to protect our planet. We need more space to live and play in; we are trying to balance expanding into the wild areas with protecting open spaces, the plants, animals and other resources in them. We need electricity to power our computers, televisions, microwave ovens, toys, radios, cell phones, almost every tool we use; we are trying to balance using electricity with finding renewable sources of electricity, like solar power or wind, that don't cause air pollution or leave behind radioactive waste.

With our concerned stewardship of the earth and its resources we should be able to leave behind a place just as nice to be in as it is now.

Please do come out and enjoy open space. Remember though leave behind nothing but footprints and take away only photographs and memories.