GOOD DIRT

The Newsletter of the Anderson Valley Land Trust
Dedicated to the Preservation and Restoration of Our Unique Rural Landscape
Fall, 2017

California Bears

In modern history there are two species of bear that have inhabited California, the grizzly bear (or brown bear) and the black bear. Today California has two subspecies of black bear; the northwest Ursus americana altifrontalis found north of the Klamath Range, and the California black bear (Ursus americana californiensis).

Black bears are the most common species of bear and are found in 41 of the 50 states in the United States. California's black bear population has increased over the past 25 years. In 1982, the statewide bear population was estimated to be between 10,000 and 15,000. Presently, the statewide black bear population is conservatively estimated to be between 25,000 and 30,000. Mendocino County ranks second or third in bear population in the state



Black bears can range in color from black to blond

meaning there are about 2,000 to 3,000 bears in the county. There are 18 subspecies of black bear in North America, mostly defined by geographical boundaries, although there are also some differentiating physical and biological characteristics as well. Black bears vary in color from light cinnamon to black and can range in adult size from 200-600 pounds. They are usually solitary animals whose lifestyles are dictated by their biological need to consume large quantities of food. Bears only tolerate the presence of other bears during the breeding season, when a female (called sows) is with her cubs, or when bears congregate in areas with concentrated food sources such as garbage dumps and salmon streams. Adult male bears (called boars) are not part of the family unit.

Sequoia sempervirens

Coast Redwood

When choosing a native plant for this column, it was rather surprising to realize that in all the years of GOOD DIRT, the iconic coast redwood of this valley had yet to take the stage!

Famous around the globe for its great beauty and immense stature, the coast redwood is probably one of our best-known California natives, and is an iconic tree of Anderson Valley. As the planet's tallest living organism, capable of exceeding 360 feet in height, Sequoia sempervirens can in one way be thought of as a holiday tree for the world rather than the living room, given its classic pyramidal form, emerald aromatic needles, but mostly its impressive scale. The first part of its botanical name derives from the famous Cherokee chief of yore and the second part from the fact that the tree is evergreen. Its common name is very apt as the native range of Sequoia sempervirens hugs the coast (rarely occurring more than 30 miles inland) and both the lumber and bark are indeed of reddish hue. The two other redwoods share this latter characteristic, but not the former. Sequoiadendron giganteum, giant redwood, endemic to California, is found solely in scattered groves in the southern Sierra Nevada. Metasequoia glyptostroboides, dawn redwood, grows in the wild only in central China. The coast redwood boasts many other interesting traits as well. Its trunk rapidly grows straight and tall; its wood has a natural resistance to insects, decay, and fire; its fresh green foliage traps and drips the summer fog that envelops its natural coastal habitat thus providing an additional several inches of annual "rainfall" to its roots; it propagates itself prolifically through both seedlings and suckering; it can survive flooding by creating an entire new root system above the old; and to top it all off, coast redwood can enjoy a very long life, perhaps 2,000 years...a truly amazing tree!! Continued on page 2



Photo by Mike Kahn

THE NUMBERS - PRESIDENT'S MESSAGE:

As the new Board President I thought a good action item for myself would be to take a step back and look at the viability of our organization and what we really do. In so doing, one particular highlight that rather astounded me was the number of individuals and organizations that contribute financially or through donated goods and services during the year that helps us keep our operation moving forward. You know who you are. And let me say, whether you contributed \$10 or \$1,000 dollars last year, it means everything to us - THANK YOU so very much.

Now here is what really made me stop and think. I looked at the last issue of Good Dirt where we list donors. It filled an entire page. There were 241 names of individuals or organizations on the donations list and another 32 names that provided in-kind donations of goods of services. I really did count them. And then I got a little curious and went back 10 years. For the years 2006-7 the list was 121 names. That is quite a difference.

We are fortunate that your generosity has truly helped us keep pace with our work. Why? Because our responsibilities have grown. We now manage 27 easements totaling 2,397 acres. In 2006 we managed 16 easements totaling 1,011.4 acres. With each new prospective easement, it takes resources to prepare the baseline reporting that must be done, to enter into an agreement, and to expend legal and filing fees. Once complete, every easement is then monitored each and every year consistent with Land Trust Alliance Standards and Practices.

And then there is the "in perpetuity" component of every easement. Yes, conditions change when a long-term commitment is made. We have learned that life was simple in 1992 with our first easement. We had one property owner and one site to monitor. Twenty-five years later ten of our easements have changed owners, sometimes as many as three times. With each new change in ownership there is an obligation that takes AVLT time and resources

to: (1) welcome the new owners to Anderson Valley, and (2) answer any questions they have about the easement and help them better understand the conditions of the easement. This is a trend, and a responsibility, that will never go away. (see related article "Consistent Conservation and Time" on page 5)

Along with our core mission involving conservation easements, we continue to provide, generally free of charge, programs such as wildflower walks, lectures ranging from resilient landscapes to dragonflies & newts to trail building, and workshops like the one we help organize on forest, farm and ranch succession planning.

So our numbers grow and we are busy. To the point, your donations truly run the AVLT engine. On behalf of all the AVLT Board, I appeal to you to please continue your support in whatever way you can so we can continue to do what we do. Thank you.

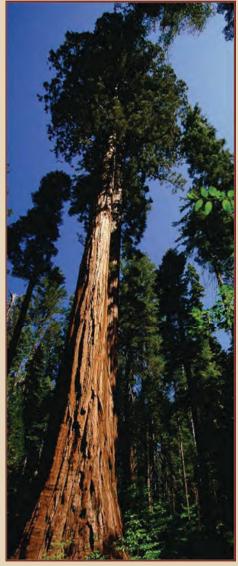
Sincerely, Patrick Miller President, AVLT Board of Directors



Sequoia sempervirens (continued)

Despite all its adaptive tricks, the native range of the coast redwood has diminished greatly over the centuries, believed to be due to environmental changes that have resulted in drier, more extreme climatic conditions, as well as extensive logging of a tree whose lumber continues as a valued mainstay of architecture and landscape design. But where old growth stands remain they form dense forests that provide a breathtaking experience unrivaled in their play of light and shadow and majesty....giving the feeling that one is in a cathedral of nature's design and a reminder that we are but small humans after all.

Our lovely Hendy Woods State Park offers wonderful opportunities to stroll through splendid groves of these magnificent trees and partake of the magical environment they create. Enjoy! Written by Jane Miller



Coast Redwood

California Bears (Continued)

Like all animals, black bears exhibit specific adaptations that help them survive in their habitats. While little research is available on the extent of black bear hearing and sight, evidence suggests that bears may have the keenest sense of smell in the animal world. Black bears exhibit certain behaviors that can sometimes forecast their mood or intentions.

A black bear standing on its hind legs is often curious, and is trying to see or hear better. A nervous black bear may salivate excessively. A frightened black bear may run off or act defensively, giving visual and vocal cues such as swatting the ground with its paw or blowing explosively through its nostrils. Another interesting survival adaptation is the ability for the fertilized egg to attach to the uterine wall of a female without impregnating her until she has sufficient energy to support pregnancy. If she does not, the pregnancy aborts naturally, which helps keep their population in balance. California black bears tend to den, or enter a lethargic winter status, rather than hibernate.

Black bears have a wide range from the North American subarctic to the sub tropics. They can adapt to most elevations, and are opportunistic omnivores allowing them a wide range of food sources. They typically



Black Bear

live in largely forested areas, but do leave forests in search of food. Bears that are accustomed to people become too bold and lose their fear of humans. Habituated bears will repeatedly return to camping and residential areas where they smell food and often this results in relocation. In a worst-case scenario, a depredation permit may be issued as a last step in a series of steps taken to eliminate the problem. Considering the amount of interaction between bears and humans, there are few attacks or fatalities. They are typically not aggressive, unless cubs are threatened, and usually they run away. If a bear is aggressive stand your ground, look big and make noise. The best way to avoid bears is to keep livestock feed, compost, trash or anything a bear might be attracted to away from it.

Grizzly bears are an American icon and a symbol of the Great American West. In 1975 when they had been wiped out almost entirely, grizzly bears in the lower 48 states were placed on the endangered species list. Today grizzlies occupy less than 2 percent of their original range. The California grizzly was hunted to extinction around the turn of the century, yet remains the state symbol and animal. Adult females range in size from 200-450 pounds and males grow to 300-850 pounds, with a lifespan of 20-25 years. Like black bears, grizzly bears can range in color from black to blond. Although they are usually larger than black bears size is not a good indicator of which species is which. The best indicators are the size of the shoulders, the profile of the face and the length of the claws. The grizzly bear has a pronounced shoulder hump, which the black bear lacks. It also has a concave or "dished" facial profile, smaller ears and much larger claws than the black bear. Black bears have a flatter, "Roman-nose" profile, larger ears, no visible shoulder hump and smaller claws.



Grizzly Bear

Reintroducing Grizzlies into the ecosystem could be an important step toward regaining the biodiversity of certain areas. In 2014, the U.S. Fish and Wildlife Service (USFWS) received and rejected a petition from the Center of Biological Diversity to conduct feasibility studies on reintroducing grizzly bears to wilderness areas throughout the western United States, including the Sierra Nevada in California. The Center is currently collecting signatures for a new petition urging the California Fish and Game Commission to explore options to reintroduce the grizzlies to the Golden State. According to the Center, there is potential habitat covering 8,000 square miles of the southern Sierra Nevada that the state could consider seeding with transplanted grizzlies. Wildlife scientists have also mentioned areas in the northwest corner of the state, the Klamath Mountains

and Trinity Alps, as potential new homes for grizzly bears. If the Commission takes action it would likely mean ordering the California Department of Fish and Wildlife to conduct a study on reintroducing the grizzly to California.

Bears play an important role and have a positive impact on the environment. They affect the ecosystem from the top down. When they are no longer present in the ecosystem ungulate populations grow and become out of balance, altering the vegetation structure of an area. Bears also do a lot of digging and foraging, helping to mix up the nutrient levels in the soil and increasing the equilibrium of the ecosystem. They disperse seeds in the forest along with a little "fertilizer" to get them started. A flourishing bear population usually means a flourishing ecosystem with a thriving flora and fauna.

Written By Bon Goodell & Trey Petrey

The Mendocino County RCD (MCRCD), The Nature Conservancy (TNC), and Trout Unlimited (TU) formed a partnership in 2015, to apply for grant funding to update planning recommendations and identify projects that have the potential to optimize stream flows and enhance habitat for salmon species in the Navarro River. The planning and project development proposal was awarded funding from the CA Wildlife Conservation Board (WCB) in spring, 2016. Since 1998, the Navarro Watershed Restoration Plan, championed by AVLT, has been the "go-to" restoration document. To augment and update planning recommendations, MCRCD has led the partnership in outreaching to landowners and educating the community about the work our partnership is doing to foster opportunities for project development and to identify flow enhancement strategies. Our collective project planning to date has been to establish a Technical Advisory Group, with representation from multiple stakeholders including AVLT's Barbara Goodell, to review planning documents and recovery plan recommendations, and to prioritize projects by sub-watershed and water needs. The project includes working with landowners to develop projects, weighing the feasibility of flow enhancement options, calculating how much benefit each strategy might yield, what permits are needed, and identification of potential funding for implementation—as well as potential water right assistance we might offer. This process is, for the purposes of this grant, called "30% design".

The partnership will develop 5-8 water storage and forbearance projects or large wood accumulation projects. Together, we will develop 2 to 3 water storage projects to 30% design, and an estimated 3 large wood accumulation projects to 30% design. TU is working with a contractor to identify strategies for enhancing groundwater storage through infiltration; those projects will also be taken to the 30% design level. The groundwater infiltration projects will be designed to increase groundwater levels and summer base flows, potentially in the North Fork Navarro. TNC, with support from a subcontractor, will further develop a voluntary, collaborative water management template for a future pilot project.

The reintroduction of large woody material is recognized as one of the more effective ways to improve in-stream conditions for salmonids. For several years, MCRCD has been working with state and federal agencies, NGOs, and landowners throughout Mendocino County on a large wood reintroduction method known as "accelerated recruitment". The role of large wood reintroduction is to put back this key habitat element into fish-bearing streams with deficient wood volumes.

The core planning team has applied for a second phase of funding from WCB to complete project designs to 100% (also called "shovel ready") and to implement storage and forbearance, large wood, and collaborative water management that will ideally be demonstrated in one tributary watershed. For further information you can contact Linda MacElwee at 895-3230.

Patty Madigan is conservation programs manager with the Mendocino County RCD, and lives in Comptche--where all roads lead--and the Navarro, Albion and Big River watersheds meet!

Mendocino County Oak Woodland Conservation Working Group

The Mendocino County Resource Conservation District has initiated a working group to look at various ways to proactively help protect Mendocino County's native oak woodlands and the habitat they provide for plant and animal life in our ecosystem. The network includes representatives of conservation organizations within the County, scientists, universities, and government agencies. AVLT board members, Glynnis Jones and Barbara Goodell have been selected to participate.

To date three network meetings have been held for organizing the framework of the group, establishing a mission statement, and forming initial goals. As the scale of the working group grows it may also lead to a blueprint for approaching the conservation of other habitats in Mendocino County. Committees have been set up to address

Written by Barbara Goodell



oak woodland protection goals including ones to create a database of the more viable oak woodlands in the County to prepare for opportunities for conservation easements, planting projects, habitat protection, and enhancement projects; another to encourage oak woodland conservation in the new cannabis regulations; and another to develop guiding principles for landowners to follow when managing their oak woodlands.

Looking Back: Bickell Ranch: Historical Family Ranch with Strong Protection

Written by Marilyn Davin

Tom Bickell's 695-acre property sits at the end of Elkhorn Road, near the headwaters of Rancheria Creek. Working with AVLT, he placed a conservation easement on the entire property in 2008. Its roads wind by three reservoirs and through a forest of mixed redwood, Douglas fir and hardwoods. On a rise beside the main entry road stands a madrone that's 20-feet around at waist level, one of the biggest Tom says he's ever seen. "This thing has limbs that are as big as tree trunks," he said on a recent visit to his cabin, which his dad built in 1960.

When he was still in grammar school in the Bay Area, Tom began visiting the property with his dad, who bought the last 400 acres of the parcel back in the late 1950s. The area was extensively logged in the first half of the twentieth century; one redwood supplied all the neighbors with enough wood for all of their split-rail fences. The erosion was terrible. "When it rained it looked like chocolate pudding running down the creek," Tom said. "It took 25 to 30 years before we could see the land coming back."

Preservation of the property was well underway when Tom inherited it back in 1990. His dad, who was in the lumber business, changed his philosophy and had stopped cutting down the trees. "In the long run, he came around," Tom said. "He loved it here."



Tom Bickell

The land continues to heal. Today the creeks run clear and the forest's second growth is maturing. Tom wants to keep it that way. That's why he decided to establish a conservation easement, which he first learned about from a flyer he got in the mail. "I didn't want this place to be logged again," he said. "I also don't want people dividing up the land; it would have a negative effect on the animals and the ecology."

Tom's easement includes his timber management plan, which contains a residential zone and allows him to cut trees only for the health of the forest – not "thinning" which Tom said just allows someone to "just cut every other tree." He stipulated in the provisions of the easement to keep the ten largest trees on every acre, and to maintain the habitat along the banks of the property's creeks and streams.

Tom says he sees the easement as a way to gain control over the fate of his property, not lose it. "I sleep a lot better and I don't worry about what's going to happen when I am gone. I didn't want to see this place logged and ruined. No redwoods can be logged here ever." And though he says his grandkids are still too young to do anything besides play in the forest, he's happy that it will be just as it is when they – and their grandkids – eventually inherit it.

Consistent Conservation and Time

Written by Patrick Miller

The diversity of land uses involved with conservation easements that AVLT manages may not be well known. One of the most common types involves a private residential property with working timberlands in Timber Preserve Zoning. However, our conservation easements also involve highly productive agricultural lands, vineyards, riparian corridors, water rights, and group retreat centers. Many of the easements we hold can be seen from Highway 128 and as such help conserve the visual experience of Anderson Valley as a rural landscape.

As referenced in the President's letter, many of the easements that AVLT stewards have involved multiple ownership changes over the years. One such easement is on property long known as "Shenoa", which is now called "The Land". The property is located at the headwaters of the Navarro River, where Rancheria Creek, Anderson Creek, and Indian Creek all come together. In 2000, AVLT worked with Paul and Melody Haller to create a conservation easement that would protect the resource values of their land in perpetuity, but would allow the owner continued use of the property as a commercial group and retreat facility.

This easement generally involves four zones: a development zone that encompasses all the structures, recreation features and group use facilities limiting the number new structures to that zone; a working, sustainable forest zone that includes significant shoreline and riparian sections of the Navarro River and Rancheria Creek; an agriculture zone around organic gardens; and a protected grassland zone to remain a meadow for deer and raptors, and the human eye, to peacefully enjoy. After the easement was established the property was sold to an individual from out of the area who had minimal presence in Anderson Valley. The new owner contracted with a company from the Bay Area to manage the property, and although they did nothing to reduce conservation values, little was done to enhance the conserved resources of the land.

"The Land" took ownership of the property last year. AVLT met with the new owners and the on-site manager, who clearly take seriously their own self-described "imperative of being responsible stewards of the land and good neighbors". It is evident that they understand that the quality of the landscape and habitats it supports are key to the overall quality of their retreat programs. We look forward to working with them as they enhance an already spectacular headwaters property.

GOOD DIRT



INSIDE DIRT

CALIFORNIA BEARS PRESIDENT'S LETTER COAST REDWOOD CONSERVATION AND TIME

BICKELL RANCH NAVARRO RIVER STREAM FLOW OAK WOODLAND CONSERVATION

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"Conservation is a team sport."

Dave Jensen, Mendocino Coast Audubon Association

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