

Long-time Hidden Valley resident Bill Grenfell (1929-2008) was a naturalist who promoted understanding of our wildlife and natural environment, frequently giving talks and leading nature walks. He wrote this series of articles for the HV newsletter in 1996-97. Thanks to Eleanor Grenfell for permission to republish the articles on our website.

The Nature of Hidden Valley

By

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Beavers

November, 1996

Beavers, beavers, beavers!!!! Here we go with the beavers again. They are damming Miner's Ravine, messing up our lake outlets, and are chewing down some trees. Let's kill them. No, let them be. What to do? It appears they are getting reestablished after the big flood of January 9 and 10, 1995. On the morning of the flood, where Miner's Ravine crosses Barton Rd., twelve beavers were counted being swept down stream in about an hour. Most of our beavers probably ended up in Rio Linda. Now, others are taking their place. That process will most likely continue if the habitat favors them.



Usually the first sign of a beaver's presence is a V-shaped series of ripples on the quiet surface of the water. Closer inspection reveals the nostrils, eyes, and ears of a beaver silently swimming at the convergence of the lines of waves. The tail is used as a propeller, not a rudder. If your presence is detected you may hear a resounding plop as the beaver slaps its tail on the surface and dives for safety.

Beavers will either build a lodge or burrow into a bank in order to construct a den. In Hidden Valley there sometimes is a combination of the two. The entrance to the den is underwater. A litter consists of two to six young, called kits, which are born in April and May. They are well furred at birth. There is only one litter a year. Each den contains a family of beavers, the young of the year and the young of the previous year. When the kits are approaching their second year, they are driven out to start a colony of their own.

This largest North American rodent is a herbivore. Once a tree is felled, the twigs and smooth green bark are eaten. Besides green bark, beavers eat willow rootlets, grasses, cattails, tules and a variety of pond weeds.

A great deal of beaver lore does not stand the test of scientific inquiry. Beavers fell trees toward the water, not by design but because stream or

lake-side trees generally lean that way. A beaver dam is arched across, not because the beaver is a good engineer, but because the current carries the material that way while the darn is being built. There are stories about the beaver using its paddle-like tail as a trowel to plaster mud on its dams and houses. Not so.

Some folks in the Valley enjoy observing beavers. Others regard them as destructive rodents and feel they should be destroyed. Unfortunately, trapping and relocating is not an option. First of all, it's against the law; second, it is difficult to find property owners to accept them; third, they are very difficult to catch in a live trap.

If beavers are damaging trees, we can wrap the trees with wire mesh. This has been done on many cottonwoods, willows, sweet gums and white alders in the Valley. We could organize another work party to do more. It's hard work, but it's effective. If we have a problem with beavers increasing the height of outlet dams on some of our lakes, that can be fixed. "Beaver pipes" can be installed in the dams at whatever water level we want. No matter how high the beavers build their dams, water will drain through these pipes and the lake level will remain constant. If they are blocking culverts, devices can be installed to prevent that.

There may be only two methods of control that we can use. One would be to spend some time and money up front to prevent beavers from destroying trees or disrupting water systems. The other choice would be to engage in a trapping and killing program every two years or so. However, trapping is not easy as some may think, particularly when traps must be set so they don't injure or kill waterfowl, herons, water-loving dogs and other "non-target" wildlife.

If you want to observe the Hidden Valley beavers at work, go to Pine or Laurel Lake weirs during the twilight hours - dawn or dusk. Be very quiet as you approach the weir and you will see the beavers making their "dam" of pond weeds and mud. How many beavers do you see working?

Western Gray Squirrel

December, 1996

Those of you who enjoy walking in our common property may have noticed pine cone fragments at the base of some of our gray (digger) pines. You have found tree squirrel "sign." The Western Gray Squirrel is the largest of California's native tree squirrels, and is the only one found in Hidden Valley. It is easily recognized by its long bushy tail. The pelage (fur) is uniformly gray above with white underparts.



This mammal is primarily an acorn eater and most of its range includes oak trees of various species. It also feeds on other fruits, mushrooms and buds. They take sunflower seeds from my bird feeders almost daily. We have three species of oak in Hidden Valley and all provide food for squirrels. Those oaks are interior live oak, blue oak, and valley oak. When acorns fall in autumn, squirrels spend considerable time on the ground gathering and burying

each acorn in a hole three to four inches deep. Squirrels retrieve these acorns by sense of smell. Burying acorns also helps with the propagation of young trees that eventually replace older trees. Squirrels occasionally attempt to store acorns under roof shingles. When this occurs it is difficult for the home owner to appreciate the beauty of these wild creatures. However, I know of only two cases in Hidden Valley since 1962. Nuisance squirrels can best be eliminated by capture in live-traps and then releasing them at least seven miles from the capture site.

The Western Gray Squirrel may enlarge an old woodpecker hole for its brood den. They also use wood duck nest boxes, hollowed out tree cavities and drays (outside nests of leaves and twigs built on branches.) I have seen many drays in Hidden Valley over the years. Some of you may be fortunate enough to have squirrels nest on your own property. Those of you that have soft barked trees, such as coast redwood or eucalyptus, in your yards may notice scratch or shred marks on the trunks. Squirrels use shredded bark to line their nests, along with leaves and small sticks.

In late winter or summer, after a gestation period of forty-four days, a litter of three to five young is born. Two litters per year are the general rule. Tree

squirrels develop slowly compared to other rodents. The babies are blind and helpless at birth and weaning may not occur until nine weeks of age. Young may not be self supporting until twelve weeks or older. Female gray squirrels usually attain sexual maturity at eleven months.

These fascinating critters have developed a unique style of predator avoidance. On the ground when they sense danger, and no trees are close by, they swish their tails, and dodge and dart back and forth. This practice works well when avoiding birds of prey or other natural predators, but it doesn't help them a bit when a car is approaching. Quite often they will do their back and forth dance in front of an oncoming vehicle, with disastrous results. I have seen many road-killed gray squirrels on Hidden Valley roads. and elsewhere. Slowing your vehicle or coming to a stop will allow these beautiful animals a chance to escape.

Canada Goose

January, 1997

Goose Music! I love the sound of goose music. We hear it almost daily in Hidden Valley. Of course I'm referring to the clamorous a-honk, ka-ronk, ka-honk of our resident Canada geese. The sound has a wilderness aura about it, and never fails to stir the blood of this nature lover. These birds often talk among themselves. In fact, researchers have discovered that Canada geese utter at least ten different vocalizations, each in response to a certain situation confronting them.

There are several subspecies (subtle differences in color pattern and size) of Canada geese throughout their range in North America. All Canada geese are distinguished by the black head and neck, with the white patch that runs under the chin and up onto the cheeks. The black neck contrasts with the light brown body. Technically our subspecies is called the Great Basin or Western Canada Goose (*Branta canadensis moffitti*). This is California's largest goose and the only one that nests in the state.

They weigh between eight and ten pounds. Unlike ducks, male and female geese look identical, except that the female may be slightly smaller. Band records indicate that some wild birds have lived 12, 18 and 23 years!

Canada (Canadian is incorrect) geese generally mate for life. However, when separated by death, the survivor seeks a new mate. Except for the Great Horned Owl and a few others, the Canada Goose is the very first bird to nest in the spring. In Hidden Valley, they seem to prefer the islands in our lakes. The clutch size ranges between three and five eggs. While the male (gander) stands guard a short distance away, the female (goose) incubates. Usually she leaves the nest twice daily for a short break early in the morning and late in the afternoon. Incubation ranges from 25 to 28 days. Last year at least two pairs hatched seven goslings on our common property. Both parents escort their young from the time they leave the nest. Goslings can fly between 50 and 60 days, usually just after our spring wild flowers disappear. Family groups stay together until the next breeding season. Many



skeins of geese that we observe overhead in summer, fall and winter consist of one or more family groups. A family group consists of two adults and young of the year. A flock of geese on the ground is a gaggle. A flock of geese in flight is a skein.

Canada geese feed on grass, roots, stems, leaves and green parts of aquatic plants. They also consume cultivated grains. They feed mostly by grazing on land. However, they may dip their head and upend in the water. They have benefitted greatly from the agricultural products of humans, and have increased in number throughout their range in the United States. Today, there are probably more of them than when the Pilgrims landed.

In the early sixties and before, Canada geese only wintered here. In the spring they would migrate over the Sierra Nevada and breed in the great basin. Not anymore. At some point in the early seventies many Canada geese somehow decided that South Placer wasn't a bad place to spend the entire year. Since then, their numbers seem to be increasing. I would venture that it is only a matter of time before we have more geese than we want in the south Placer area.

Wildlife adds greatly to the esthetics of Hidden Valley. I think most of us would agree that our "goose birds" are one of the most visible, audible, distinctive and attractive Hidden Valley bird species. Hidden Valley, and the world for that matter, would not be nearly as fascinating without goose music.

Great Blue Heron

February, 1997

Over the years I have come to refer to this bird as our "resident pterodactyl". For some reason that's what I think of when I see a Great Blue Heron, with slow wing beats, flying over Hidden Valley. When a heron flies, the neck is pulled in with a noticeable kink, and the legs are held out straight behind. The wingspread is almost six feet.

Along with our Canada geese, the Great Blue Heron is probably one of the most recognized bird species in Hidden Valley. It is often seen hunting along the shores of our lakes or perched high in a tree. When hunting, this bird either stands motionless or advances cautiously one slow step at a time. When near its prey, a lightning quick forward plunge of the long neck and bill may catch a meal. My observations indicate that herons are successful about five percent of the time.



GBH's stand about four feet tall. The back and wings are blue-gray, the underparts are whitish with black streaking on the belly. The head is white with a black stripe ending in black plumes behind the eye. The black and white foreneck and chest end in gray plumes in the breeding adult (visible at this time of year). Juveniles lack plumes and are more brownish. Great Blue Herons are often miscalled cranes. Cranes fly with the neck outstretched and have a shorter bill. Cranes are not found in Hidden Valley. Watch for flocks of Sandhill

cranes high overhead in spring as they migrate north, or in fall when they migrate south.

The Great Blue Heron's diet is varied. In HVCA fish and frogs are the primary food. However herons feed on mice, gophers, lizards, insects or just about anything that can be captured and subdued. I was photographing herons at the Palo Alto Baylands marsh one day and observed a GBH stalk, catch and devour an endangered marsh bird, a black rail. One morning at Heron Pond here in HVCA I watched a heron catch a large bluegill. Typically the bird will toss the fish and recapture it in its bill several times to rearrange it so it can be swallowed head first. This bluegill was so large that the heron finally gave

up and dropped it after several minutes of trying to gulp it down.

Herons usually nest in colonies called rookeries. One rookery close by is in a gray pine on Lake Natomas. There is another near the peninsula camp grounds at Folsom Lake State Park. Rookeries are often shared with other herons and egrets. For example a large rookery in a grove of eucalyptus trees at the Grizzly Island Wildlife Area in Solano County is shared by Great Blues, Great Egrets (another regular at HVCA), Snowy Egrets and Black-crowned Night Herons. Birds may return to the same rookery year after year. There is also a large rookery at the Graylodge Wildlife Area Just west of Gridley.

Courtship displays are elaborate and usually start in December or January. Then three to five light bluish green eggs are deposited in a stick nest. Incubation takes 28 days and the chicks fledge (acquire the feathers necessary for flight) in 55-60 days. Both sexes incubate and feed the young. At first, the young are fed regurgitated food, usually fish. As they mature they are fed whole fish. Heron rookeries smell like dead fish. Not a pleasure for those with sensitive olfactory systems. Heron rookeries are also very noisy. There is a whole lot of talking and squawking going on. Sometimes the noise from a rookery discloses its presence before you actually see it.

The Great Blue Heron is the largest, most widely distributed and best known of the American herons. It is a stately bird, graceful in its movements, and an artistic feature in the landscape. At least one or two visit our lakes and ponds just about every day of the year. The next time you see a GBH hunting at the edge of one of our lakes, stop and observe for five minutes or so. A fascinating scenario of predator-prey interaction may unfold before your eyes. It's even better than watching a nature program on TV!

Hummingbirds

April, 1997

Imagine what our European forebears must have thought when they first spotted tiny birds in the new world that could fly backwards and sideways. They can hover, blast off at warp speed and stop on a dime with nine cents change. Hummers can also fly upside down. All these aerobatics are accomplished with 20 to 80 wing beats per second! Hummingbirds are only found in North and South

America. At least 320 species have evolved from ancestral roots in the neotropics. Only 15 species occur regularly north of Mexico. I know of only five species (maybe six) that have been seen in HVCA, and only two (Anna's and Black-chinned) species nest here.



Most hummingbirds in this area migrate south to Central America in fall and return in spring. One exception, the Anna's hummingbird, remains in this area all year (some may migrate, but most do not). The Anna's hummer male is identified by its iridescent reddish head and throat (gorget). Male hummingbirds, lacking much in the way of song, use their brilliant throats flashed in sunlight during displays. There is no pigment in these feathers. The feather structure is such that light is bent resulting in iridescent colors. At most angles hummingbirds iridescent feathers appear black.

Black-chinned hummingbirds arrive from Mexico in mid April and stay through September. This species is slightly smaller and more slender when compared to the more robust Anna's, and the bill is curved downward slightly. The gorget feathers of the male, when the sun hits them just right, are black above and purple below. Black-chins court and breed immediately upon arrival because there isn't much time before they must depart southward. The resident Anna's start to breed in December. Hummingbird nests are about the size of a large walnut and are made of plant down bound with spider's silk and usually decorated with lichen. Hummingbirds can often be seen gathering spider silk throughout HVCA. Two eggs about the size of a pea are laid. Incubation takes 13 - 19 days, and fledging occurs after about 18 - 23 days. Two or three broods are possible in one season.

During April and May other species of hummers may be observed in HVCA as

they migrate to their breeding territories in the north or in the Sierra. During this time watch for Rufous and Calliope hummers. Rufous can also be observed in the fall as they migrate south. They usually appear at my feeders from mid August to mid September. The Costa's hummingbird occasionally occurs here, but at unpredictable times, and not every year.



Many folks enjoy attracting hummingbirds to their yards with artificial feeders. This is OK, but it requires a big time commitment. The best feeder consists of a quart-size glass bottle that hangs upside down with a red plastic bottom and four or six feeding ports that face upwards. The correct fluid formula is four parts water to one part sugar. Of course they like it sweeter, but it's not good for them. Red food coloring may be

harmful to the liver. The red plastic on the feeder will attract the birds. If a pre-mixed nectar packet comes with your feeder, toss it and make your own. Put four cups of water in a pan and bring it to a boil. Remove water from heat. Immediately add one cup of granulated sugar (not saccharin, not nutrasweet). Hummers hate brown sugar, and honey may cause a fatal tongue fungus. Boiling kills bacteria and helps to dissolve sugar. Stir until all sugar is dissolved. Don't over boil (that will give it a burned taste). When cool, store in a refrigerator. During periods of low or no use, provide only a couple of inches at a time. The fluid can spoil rapidly, particularly in summer. Change the fluid and clean the feeder at least once a week, whether or not the birds have found it. If left too long the syrup ferments, and even though it may look good to you, hummingbirds know better. Do not place hummingbird feeders in direct sunlight. In the winter, if a freeze is suspected, bring the feeders in after dark and replace them before dawn. Hummers can survive cold, but they must eat immediately at daybreak or they will starve. If all this seems like too much bother, don't start. Certain flower bearing plants will also attract hummers to your yard. They also eat insects. Often I observe them hovering close to the ground as they feed on ants.

Some folks believe that hummingbird feeders maintained during fall and winter will disrupt the birds migration behavior. There is no evidence in the ornithological literature to support this notion.

Hummingbirds are fascinating not only because of their brilliant metallic plumage, but also because of their amazing powers of flight. Even the most

casual observers of nature take notice when hummingbirds are observed feeding, defending territories, or performing courtship displays. Much of this activity is going on all around us right now. Watch and enjoy.

Wood Duck

June, 1997

A drake wood duck perched on a fallen cottonwood snag at Laurel Lake, in my mind, is one of the more breath taking sights in Hidden Valley. The glossy green and violet crest, the striking pattern of black and white on the cheeks, and the burgundy breast, flecked with white collectively make the wood duck one of the top contenders for the most gorgeous duck in the world. The hen is more attractive than the mottled brown typical of other dabbling ducks. (Dabbling ducks feed below the water surface by tipping their tail feathers up.) There is a pronounced eye ring that trails behind like a tear drop. The white chin and throat of the female is discernible at considerable distances. On the water, wood ducks ride more buoyantly than other ducks, as evidenced by their tails inclined an inch or more above the surface.



Wood ducks prefer quiet waters of creeks and lake where oaks, willows and cottonwoods shade the banks and furnish nesting cavities. Laurel Lake and Miner's Ravine are favored places in Hidden Valley. Wood ducks often can be seen at the Laurel Lake inlet across from McArthur's home. Wood ducks are cavity nesters. That means they nest in trees that have suitable size openings that are

the result of rotting, a broken limb or a cavity previously excavated by some other animal. Ten to fifteen eggs are laid on a bed of wood chips. Incubation takes 24-29 days. At one day of age the ducklings claw their way up the side of the cavity, take a look at the wide world below them, and bailout, sometimes from as high as sixty feet. They only weigh a few ounces so the pull of gravity is not very great and they land unhurt. Mama is there to gather them up quickly and lead them to the protection of water with overhanging wooded vegetation.

Wood ducks do not quack like our wild mallards do. The loud squealing wee-e-e-e-k, wee-e-e-e-k call by the hen is often the first indication of the presence of these birds as they beat hasty retreats through the trees. The male's call is uttered so softly that it is seldom heard. Acorns are the favored foods of adult woodies. Other foods include fruits and the seeds of other plants such as buttonbush which grows along Miner's Ravine. Aquatic animal

life such as dragonfly nymphs and small fish make up part of the diet of ducklings and adult. They also feed on the cracked corn that is generously supplied by the McArthur's.

The wood duck is a permanent resident in California (it does not migrate as many other waterfowl species do), primarily along the rivers of central and northern California. The loss of nesting habitat (hollow trees) is probably one of the main factors limiting the population of this tree-nesting species. They readily take to nesting boxes that are erected for their use. We are fortunate that Hidden Valley has a small population of these attractive ducks that we all can enjoy as we walk or ride horseback through our common property.

Western Pond Turtle

July, 1997

One of the more visible reptiles found in Hidden Valley is the Western Pond Turtle. Usually they can be seen basking on rocks or logs in the ponds of our common property. This species is the only native California turtle north of the Colorado River. Other species, sometimes observed in our lakes have been introduced by folks that tire of them as pets. Not a good thing.

This turtle (some times called mud turtle) is fairly plain. The carapace (upper shell) is olive, dark brown, to blackish with each shield marked with a network of spots, lines, or dashes of black or brown. This is not too evident in the wild because basking turtles



usually have a covering of algae, duckweed, mud or other pond weeds. The plastron (belly shell) is yellowish with varied development of blackish or dark brown markings. The head, dorsal surfaces of the limbs and tail are pretty plain too. The limbs have prominent scales, flecked and lined with black. The head has spots or a network of black. Actually, if you have one of these critters in your hand, the designs are quite striking. Adults are 5 or 6 inches in carapace length.

This species is a thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches that typically have a rocky or muddy bottom with watercress, cattails, and other aquatic vegetation. Individuals leave the water to bask and females to lay eggs. In winter, except perhaps on unusually warm days, it hibernates in the mud of stream or pond bottoms .. It quickly resorts to water when disturbed. Food consists of aquatic plants, insects and carrion (one was seen eating a dead mallard).

Most of the egg laying occurs from June to mid-July. From five to eleven eggs are deposited in an earthen cavity, dug by the female, sometimes far from water. One of my neighbors found a turtle near one of the bridal paths, was concerned it was too far from water, so he returned it to a pond. That was a thoughtful gesture. However it probably was on an egg laying sojourn, and if it hadn't already laid its eggs, had to return to land anyway. I've observed them digging nest holes in the soft soil and leaf litter under oak trees. The young hatch from white eggs that are about 3/4" by 1 & 1/4". The young are about the size of a fifty cent piece. They have the daunting job of finding their way to water before they are picked up by a gray fox, red-

shouldered hawk or some other predator. Once the eggs are laid, reptiles do not care for their young. It's a tough life out there where the "law of fang and claw" prevails.

Wildlife Habitat

October, 1997

The California Interagency Wildlife Task Group was formed in 1981 to identify and describe the various wildlife habitats found in California. In October 1988 A Guide to the Wildlife Habitats of California was published. Fifty-two habitats were identified.

Five of those habitats are found in our Hidden Valley common property. They are: Blue Oak Woodland, Valley-Foothill Riparian, Grassland, Riverine and Lacustrine. The Blue Oak Woodland is the dominant habitat type and probably makes up 70 percent of our common area. The indicator tree species are blue oak, interior live oak, and gray (formerly digger) pine. Other native plants typical of this habitat include California buckeye, blue elderberry, poison oak, buck brush, California coffeeberry, toyon, coyote brush and many grasses and forbs. Two non-native shrubs common to our area are blackberry and scotch broom. Broom has pretty yellow flowers in spring and summer, but eventually will choke out most other plants. The Georgetown area is a good example of the damage scotch broom can do. There are entire hillsides there thick with broom. Blackberry is wide spread and scotch broom is most abundant in the north railroad pasture.

The Valley-Foothill Riparian habitat type is found on either side of Miner's Ravine and consists of plants that can survive with their roots in the water all or most of the year. Typical native plants include valley oak, white alder, wild rose, willows, Fremont cottonwood, button bush, and mugwort. The Annual Grassland habitat is not widespread in Hidden Valley. Small patches can be found in Oak Lake pasture and Cottonwood west pasture. The oak lake pasture grassland was re-seeded about 1968, and produces a good crop of soft chess and wild oats (good horse forage) in spring. The Cottonwood west grassland is quite degraded and consists mostly of plants with little or no forage value (such as star thistle, tar plant, curly dock and bluecurls).

One of our two aquatic habitats is Lacustrine. That's just a fancy ecological term used to describe lakes and ponds. Many of the Valley-Foothill Riparian plants are also found along the shores of our ponds and lakes or in other wet areas. Typical plants include cattail, yellow water primrose, western milfoil (parrot's feather, coontail), mosquito fern (the reddish stuff), duckweed (the green stuff) and algae. Riverine is a word used to identify rivers, streams, creeks, brooks, etc. The common denominator is that they all consist of intermittent or continually running water. Of course, Miner's Ravine is our main Riverine Habitat. Miner's Ravine is not considered a fast moving stream with riffles and an underside of rubble and gravel (some may argue that

point if they observed Miner's Ravine on the morning of January 10, 1995). Instead it is a stream of decreased velocity, and accumulated bottom sediment. Organisms of fast water are replaced by organisms adapted to slower moving water. Mollusks and crustaceans replace the rubble-dwelling insect larvae of fast water. Backswimmers, water boatman inhabit the sluggish stretches and backwaters.

The area where two habitats converge is called an ecotone. Some ecotones are very abrupt, others are a gradual blending of habitats. Ecotones generally support more wildlife diversity because they consist of a combination of at least two wildlife habitats.

Our common property is very special from a natural history perspective. It provides horse pasture (although there is very little good range forage), swimming, fishing, hiking and horseback riding. It also provides a home for 30 mammals, 130 species of birds, 13 reptiles, 3 amphibians, and at least five species of fish. Also, I have identified about 140 species of plants, but there are many, many more. And I haven't even begun to think about cataloging the insects. All in good time.