

TREE RINGS

THE JOURNAL OF THE YUBA WATERSHED INSTITUTE





TREE RINGS

THE JOURNAL OF THE YUBA WATERSHED INSTITUTE

NUMBER TWENTY-TWO, FALL 2009

Co-edited by Kurt Lorenz & Leslie Guinan

IN THIS ISSUE

Editor's Note *by Kurt Lorenz* 1

Iris *by Len Bracket* 3

Stringing the Pearls *by Bob Erickson* 14

2009 Fall YWI Calendar 18





“Goshawk”

Oh that death could come on a wing,
silent and fast
its red eye focused on the back of my neck,
leaving nothing behind but wing marks in the snow.

-Leslie Guinan

EDITOR'S NOTE

It is my pleasure to share with readers of Tree Rings a unique story that requires a place like the 'Inimin, and people like those who live here. This is the first time that Tree Rings has published an article of this length, but I hope you will agree that the story of Iris the goshawk, by Len Brackett, is well worth the space. Iris shares the issue with an essay by Bob Erikson about how this interface of wildlife and human residents might be explored and expanded in the future. Both of these are perfect examples of what the Yuba Watershed Institute is all about.

I believe it is a settled conclusion by now among most zoologists and anthropologists that there are only a very few animals that were historically willing or able to work out a life that included cooperation, or domestication, with their human neighbors. This is a subject beyond my skill to explain in detail, but suffice it to say that a handful of creatures had previously evolved traits that allowed them to coexist with, or to flourish with, and/or to be abused by humans. Critical, but not sufficient, among those traits was sociability. Most have since been bred and manipulated by humankind, and in some cases it is hard to see the stock that they came from in today's descendants. An interesting exception is the ancient sport of falconry.

Various species of raptors, usually captured in the wild and trained by their human captors, have gone "on the hunt" with their handlers for thousands of years. Images of falconry appear in Egyptian and Fertile Crescent art forms from the dawn of civilization. The ancient Egyptian sun god, Ra, was represented

"Actually one doesn't ever bend the bird's will. Rather one figures out how to please the bird, and then the roles are reversed. Otherwise the bird flies away."

as a falcon with a sun disk on his head, or sometimes a man with a falcon head. Falconry always involved a tug of wills, but Len points out, "Actually one doesn't ever bend the bird's will. Rather one figures out how to please the bird, and then the roles are reversed. Otherwise the bird flies away. Raptors simply do not understand force of will or punishment. Raptors are not social animals." The key is to help the raptor do with you, more or less the same thing they would do for themselves, but to

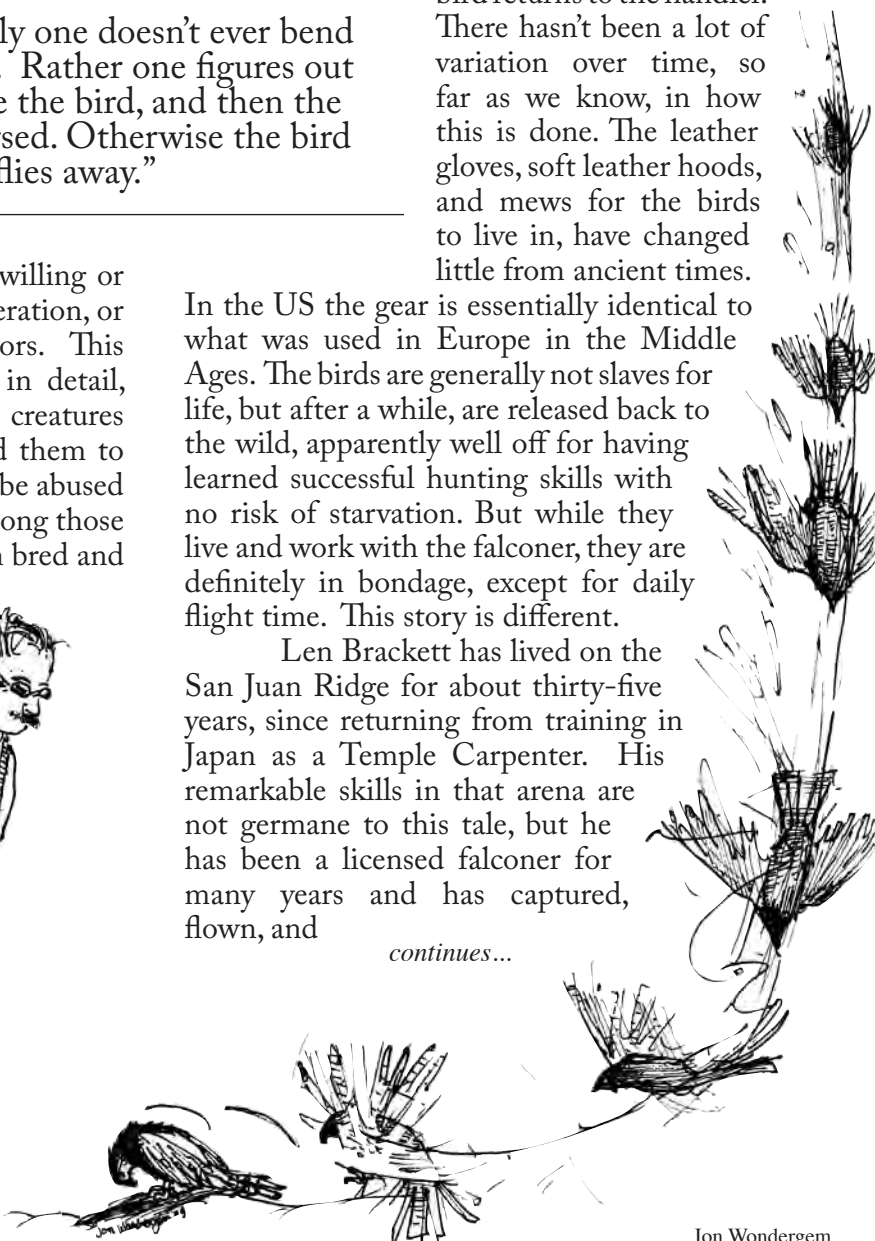
control the outcome so that the bird returns to the handler.

There hasn't been a lot of variation over time, so far as we know, in how this is done. The leather gloves, soft leather hoods, and mews for the birds to live in, have changed little from ancient times.

In the US the gear is essentially identical to what was used in Europe in the Middle Ages. The birds are generally not slaves for life, but after a while, are released back to the wild, apparently well off for having learned successful hunting skills with no risk of starvation. But while they live and work with the falconer, they are definitely in bondage, except for daily flight time. This story is different.

Len Brackett has lived on the San Juan Ridge for about thirty-five years, since returning from training in Japan as a Temple Carpenter. His remarkable skills in that arena are not germane to this tale, but he has been a licensed falconer for many years and has captured, flown, and

continues...



Jon Wondergem

EDITOR'S NOTE CONTINUED

released a number of local raptors, including Red Tailed hawks, American kestrels, a Cooper's hawk, a previous goshawk, a peregrine, a prairie falcon and a sharp-shinned hawk. But when I heard that he had worked out a relationship with a wild goshawk I was fascinated.

After receiving a draft write-up about his experiences with Iris, I went to talk to Len about it, and in the late afternoon light, he said that it was about time for Iris to come by for his evening visit. Suddenly I looked up the drive and a spectacularly beautiful late-juvenile goshawk seemed to fall through the high tree canopy of ponderosa pine and Douglas fir, and came in for a fast landing on "his" post.

I was completely unprepared for the sensation, the emotion, of what I saw. I watched through the kitchen window as Len went out to Iris and offered him a chunk of quail, feathers and all. Suddenly, in the splash of sunlight around the post, the air was a cascade of feathers as Iris plucked

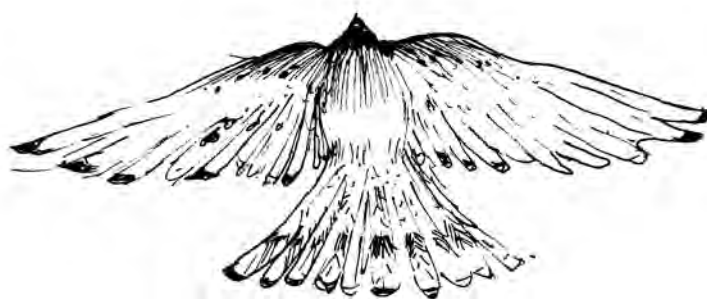
the quail, all the while snapping impatiently at the gathering yellow jackets, and began to rip apart the meat. Len called Iris to his gloved hand, and slowly brought him close to me in the open kitchen door. In a few minutes Iris was gone, instantly invisible in the darkening forest. I had just seen something that simply does not happen.

It was an unreal, mythological encounter. Nothing about it suggested the falconer showing off his captive bird. One could just as well have said that the bird captured and trained Len. I felt like I was living in adventure fiction. How about a pet dragon, or perhaps a messenger from the gods? There was something frightening about Iris, despite our size difference. I was looking at death on the wing, the essence of what predator really means. It was as if I had known it once, but had forgotten it thousands of years ago. It was a powerful experience. This is obviously a special story that deserves enough space to be told in full. Enjoy.

- Kurt Lorenz

The Yuba Watershed Institute is dedicated to preserving the biodiversity of the Yuba River Watershed. It produces educational programs and cooperates with public and private entities to establish examples of good land stewardship and management. Its pioneering project, the 'Inimim Forest, is 1,800 acres of BLM land centered on the San Juan Ridge north of Nevada City. This community-based forest plan is an on-going work in progress designed to implement the ideal of sustaining old forest habitat and producing high quality timber products.

We welcome unsolicited articles, art, letters and notes!



Copyright 2009 All Rights Reserved
Tree Rings is published from time to time by the Yuba Watershed Institute, a
501 (c)(3) organization based in Nevada City, California.

*Art by Jon Wondergem and Leslie Guinan.
Graphic Layout by Jacob Freydont-Attie, Neon Buddha Multimedia.*



June 6, 2008 Iris (on left) and two sisters (?) 70 feet up.

Iris

by Len Brackett

I met Iris on a sweltering June 6th afternoon in 2008, seven stories up in a Douglas fir. Dave Coyle stood at the foot of the tree, laughing at my terrified crabbing around the trunk. Not a rock climber, I was on my own after a fifteen-minute lesson on the use of ascenders. I wore a heavy Irish sweater, a Filson tin coat, a face shield, and a hard hat, which an angry and very large mama goshawk periodically dive-bombed, clanging the hat against my ears. I could hardly breathe. I was sure I would expire from heat stroke if I didn't fall to my death, which seemed more likely.

I was kidnapping one of the gos's three babies, and she was not amused. Although it may seem a heinous crime, what I was doing hugely improved Iris's chances of surviving. About 85 to 90 percent of young raptors

don't live to complete their first year, and Iris's siblings probably are not alive today. Starvation, predation, high-speed accidents, and disease take most of the young. There was the outside possibility, as well, that the remaining two young would get more of the food made available by their parents. Although it seems to me that adult goshawks (skilled hunters or they wouldn't have survived to adulthood) don't seem to have trouble finding enough food,

particularly during the warmer months when young and inexperienced prey abound for both parents to hunt. Very few birds can

Starvation, predation, high-speed accidents, and disease take most of the young.

outfly a goshawk who's really hungry.

Female goshawks are usually at least a third larger than their brothers, weighing between 32

and 43 ounces about 8 weeks after hatching, while the males are between 26 and 35 ounces. The young goshawk I took was the largest, presumably a female. Now I know he is a male, and the name

Iris has stuck. I also have come to understand that males are usually the first to hatch, and for good reason. The female will soon outgrow her brother, and then she's more

powerful and isn't shy about throwing her weight around. Some think that's why males are first to leave the nest, since staying in close quarters with a big, pushy female can be dangerous. As you can see in the photo, the babies appreciated my presence no more than mom did. When I nestled little Iris into my knapsack and lowered him down to Dave, I never imagined what I was in for.

If I hadn't met Steve Layman while working on Whidbey Island in Puget Sound, I would never have been in that Doug fir. I ran into Steve when I was looking for a local falconer there with whom I could fly Percy, my first goshawk, and we became friends. Without realizing it, I had introduced myself to "Mr. Goshawk," one of the most knowledgeable bird biologists and falconers in the United States. When I saw that Steve had a free goshawk, I was both thrilled and reminded of a story about a falconer in Nevada who had a wild pair nearby. They would come down from the canyon above his home. While they would never allow a person to approach, they would catch food thrown aloft (as Iris now does) and take game as the falconer and his dog flushed cottontails and jackrabbits. But the level of trust between these birds, notoriously touchy goshawks, and this falconer never developed to the degree that Steve and I have experienced with our birds.

Steve has taken his own falconry to another level of bonding between bird and man, and he has been my constant guru. On Whidbey, I watched Skeeter, Steve's tiercel, fly from the woods and land on his fist. When Steve let his four Jack Russell

terriers loose, Skeeter would catch rabbits flushed by the dogs or ducks Steve himself flushed from a local pond. Having a bird that is loose all the time and freely seeks you out and chooses to hunt with

you is the ultimate falconry; to be able to do that with one of the Sierra's totemic birds is the fulfillment of a dream.

When I brought Iris home, I wanted him to be around me all the time. So I turned the central garden of my house into a mews by simply screening the roof to keep horned owls out and, once he started flying, little Iris in. On a sturdy wooden stand I put a rubber stock-watering bowl with a nest of sticks cushioned by Incense cedar boughs, just as I had seen in Iris's hatch nest. I fed him by hand or with chopsticks, and because he needed to eat every three or four hours, I took him with me everywhere.



June, 2008 – in the nest, developing first flight feathers

The nest became his secure home. Sometimes when it was on the kitchen table or the ground, he would leave it to explore, but at the

slightest threat, he'd return to it. Even during the several weeks when I had houseguests from Japan, I kept Iris close. (He rode in the passenger seat of my car on an expedition to Bodie and Mono



June, 2008 – as a brancher.

Lake; his surreptitious hotel accommodation was the shower stall.)

Like most predator babies of any kind, goshawks are playful, especially as they are developing their first flight feathers about a month after hatching. Once his legs were strong, Iris spent his playtime attacking dust phantoms and leaves or picking up sticks and rocks with his beak, throwing them and then catching them with his feet. He would assault a crumpled piece of paper or a rubber ball. Iris especially loved tearing socks apart and running off to hide them. He'd chase the cats (he still does), gently chew on my ear, and even bite my fingers like a puppy.

At about six weeks, Iris entered the “brancher” stage of his development and began to fly from perch to perch in the central garden, where I had

positioned some large limbs. Each day, he showed marked development in his flight skills. Steve told me that as soon as Iris made his first clumsy flights, I had to release him, and even though I wanted to wait until he was stronger and more skilled, Steve was insistent. Timing was everything; if I released him when he could fly well, Steve said, Iris might just fly away, get lost, and—with his unpracticed hunting skills—starve. If I let him learn to fly at home, as Iris grew more and more able, he would get to know these woods a little at a time and eventually imprint on this place.

The day of the Great Release was July 3rd of 2008. At about nine weeks Iris was now full grown, but very unskilled, with a wingspan of about 40 inches, and he weighed 900 grams (about 2 pounds). I took a lawn chair onto the roof and spent the day there chaperoning

my little charge as he blundered from tree to tree. I was there to keep track of him and scare off any predators like great horned owls. At the end of the day, I did my best to imitate a mother goshawk, clucking and keeping my arms close to my body and

I did my best to imitate a mother goshawk, clucking and keeping my arms close to my body and throwing feathers.

throwing feathers. As predicted, when I whistled him in, Iris crash landed on the roof coming in to his nest for dinner. Then it was a simple matter to

carry the nest with him in it down the stepladder into the garden for the night.

Young goshawks' instinct is to stay near the nest because parents will bring food only to the nest and not directly to them out in the woods. When either of the parents arrives with food, the branchers (young birds learning to fly) return to the nest in a

mad rush to get their meal and fly away with it. As they become more adept, they venture farther and farther from the nest. Iris did just this, until one day I lost the telemetry radio signal that the nine-gram radio attached to his leg put out. By chance, I found him halfway down Bloomfield Road on the other side of the river as I was going to town. He was home when I returned. I was very proud of him, but Steve was concerned.

Iris was entering the “dispersal” stage of his development during which he could and likely would fly to Oregon or some other distant place if he were free to do so. Steve explained that within a week I would probably lose Iris if I didn’t put him in the mews and begin “falconry” with him. This meant playing closely with him, controlling his weight, training him to take a hood and to stay on the fist, and of course flying him free every day for an hour or two.



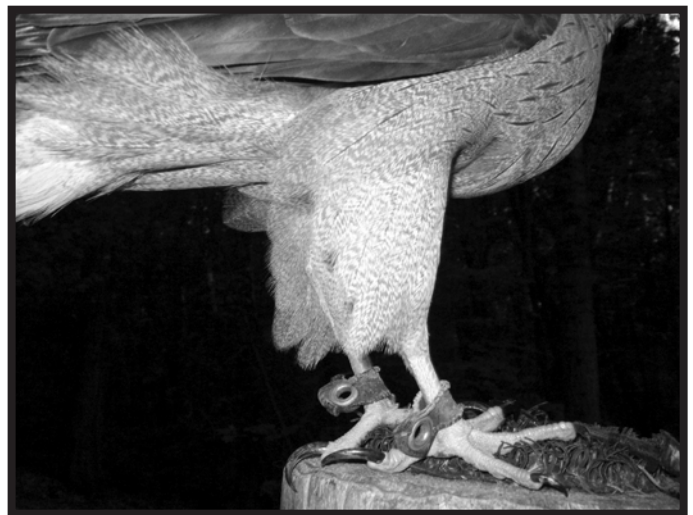
*August 9, 2008, in the mews, not so sure I’m a parent or a sibling.
Eyes are blue.*

Unpredictably, I was transformed into
a competitive sibling to be driven away.
With both feet, he’d hit me in the face
so fast I couldn’t protect myself.

I brought Iris back to the mews for two harrowing months, during which his view of me changed—and not for the better. Sometimes he regarded me as the providing parent whom he would never attack. Unpredictably, I was transformed into a competitive sibling to be driven away. With both

feet, he’d hit me in the face so fast I couldn’t protect myself. These birds are as fast with their feet as a rattlesnake; in fact, I have heard of red-tailed hawks catching rattlesnakes by the head in mid-strike.

Often I’d be feeding Iris small pieces of quail and find my fingers empty. He’d snatched the food so quickly I didn’t even see it happen. I had puncture marks all over my face and took to wearing safety glasses around him. Steve told me Iris was only going through a stage,



and soon this would be over, but I had my doubts.

The kind of liberties another raptor species might allow cannot be taken with either a Cooper’s hawk or a goshawk. High strung, they have a “stick-in-the-eye” response to sudden moves. I wasn’t able to read him and his ever-changing moods as I now can, so I made some real gaffs. Iris was becoming frightened whenever I tried to hold onto him. Our relationship was getting worse and worse. In exasperation, I decided to release him in October. It was a gamble, but Steve assured me Iris would come back.

On the second day of freedom, Iris was back home and crying like a baby for food. He still wore his jesses (leather thongs on his ankles), although I had decided that I wasn't going to try to make him do anything. After he flew for a month with jesses dangling, I took them and his bell off. A bell could



March, 2009 - Closer to home. His eye color changed to yellow.

attract horned owls, who fear a gos during the day but could easily kill one at midnight. While he was on my fist, busy with his quail dinner, I moved the radio from his leg and mounted it on his central (deck) tail feather. From that day I stopped trying to exert any control over him. Gradually his

fear disappeared, although these birds don't easily trust or forgive. A goshawk will remember every unpleasant event, unlike a peregrine or a red-tailed hawk, who have forgiving natures. If Iris becomes uneasy on my fist, he flies away and returns when he feels comfortable. It seems as long as Iris knows he has control of the situation, he's happy to keep coming to me.

He still wears a pair of leather Almieri bracelets with a gusset for attaching jesses to each leg, but they are no more an impediment to him than a bracelet would be to a person. I removed his radio when he started to molt his feathers in May of 2009. The radio was for my own convenience and education, so I could find Iris, or figure out where he spent his time, which has been fascinating. Initially Iris was imprinted on the woods around my house and usually stayed within a radius of about three or four miles. As he grew, he seemed to be going miles out, beyond the range of the radio. He would venture as far as Shady Creek to the west and into the South Yuba River canyon. To the east he traveled as far as North Bloomfield. I don't know his northern perimeter because there were times when I got no radio signal at all, and I suspect that he was crossing over to the Middle Yuba drainage and spending time there. He seemed to like hanging out on the edge of the Columbia Diggins.

I could follow his flight through the woods and watch him land on a high limb, but if I averted my eyes and tried to relocate him, he disappeared! Only if he flew or moved or I could see his silhouette would I see him again. His coloring was so perfect that finding him was like finding the hidden pictures in the Highlights magazine for children.

For the past few months Iris has established a schedule. At about two hours before dark, he comes looking for me at the house. If I'm working in the office or the shop, I can hear him calling. When he doesn't find me at home, Iris flies 200 yards and about 200 feet higher up the hill to find me there. After circling the office and shop several times, he lands on the stepladder leaning against the west wall of the

I could follow his flight through the woods and watch him land on a high limb, but if I averted my eyes and tried to relocate him, he disappeared!

office and looks in through the office window to find me. If I'm not in the office, he goes to a pine outside the shop and looks in that window for me. When he sees me, he usually lets out a loud call. Iris is an impatient hawk. If he's hungry and it's time to go hunting he can get a little peckish. When my work is done I go outside and throw down a little piece of Coturnix (restaurant supply) quail which he will land on the ground to eat. When I offer my hand and whistle, he jumps to my fist, takes a piece of quail from my hand, and flies off with it. From then on he's seriously hunting, and he's silent. We're off for a long walk through the woods, usually two or three miles.

These days, knowing he will follow me, I don't pay him much mind unless he lags, and if I'm to be any help to him at all, he has to stay with me, or flushing game for him is a waste of time. He's missed valuable flushes, and now he seems to understand he needs to stay close. He starts by coming around the corner of the shop, buzzing me as he passes. He used to give me a painful swat on the head as he went by, but he's stopped that, for which I am grateful. But he still misses me by inches. Often on our walks, he will pass me and take a perch 40-60 feet high in a tree up ahead. Ignoring him, I continue walking. Whenever he loses sight of me, he buzzes me again and lands up ahead. Occasionally I throw him some food as he flies by, which he catches in midair. We will move through the woods for miles together

at times like this.

Iris is becoming more reserved with age. Because he's been making his own kills, he's much more quiet now, rarely vocalizing except when I haven't seen him for a day or two. Then he will squawk an initial loud greeting. I bow to him and



Iris, "mantling" over a fresh Mallard drake, looking behind.

cluck and he does the same with me, and then a low whistle will bring him to my fist. Essentially I serve as Iris's hunting dog. If we approach ponds, he arrives well before I do, waiting high in a tree over the pond. No duck in its right mind would take flight with a goshawk sitting in a tree above; ducks know that they're safe on the water because they can easily dive when a raptor swoops down on them. If something forces them off the pond, though, they are at risk, and Iris has a chance to make a catch. If prey is light enough to carry, such as quail, small squirrels, and pigeons, Iris will fly off with it.

If prey is big enough to put up a fight (a mallard, a grouse, a pheasant, a big gray squirrel, perhaps even a jackrabbit), I will help him subdue it. Then I leave him on his prey and walk home. When Iris has a large catch, I don't see him for two to four days, as he's gluttoned and has little interest in anything other than sitting quietly.

Essentially I serve as Iris's hunting dog.

I have found long jackrabbit tracks in the snow, a zigzag pattern with wing marks on the snow behind. I assume it was Iris chasing (but not catching) jackrabbits. Were he a 1200 gram female

instead of a 900 gram male, Iris would have no trouble subduing a jackrabbit. Young goshawks will chase almost anything, often with no real intention of catching what they're chasing, which is how they develop their hunting skills. They will go after people, horses, bears, dogs, cats...anything that

By February, after a good chase, I began settling with my back up against a pine and sitting with Iris on my knee. He pulls one of his legs up, a gesture of ease, and slowly but constantly watches, turning his head, scanning.

pattern of the hair, suggesting he'd flown off with his prize to cache it somewhere in the woods, safe from other raptors. After a long tail chase, he caught a drake mallard and ate it all, which took a

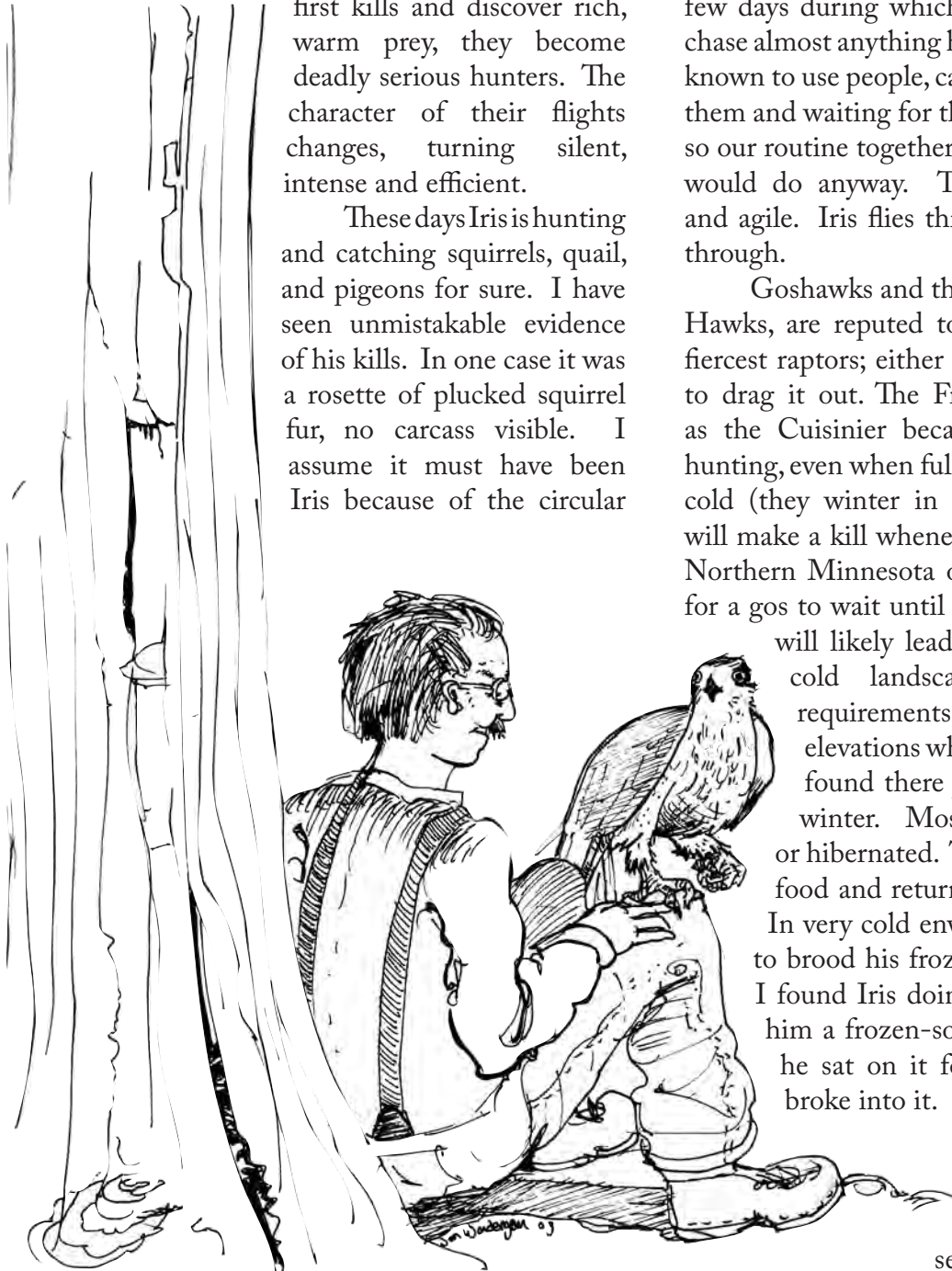
moves. After they make their first kills and discover rich, warm prey, they become deadly serious hunters. The character of their flights changes, turning silent, intense and efficient.

These days Iris is hunting and catching squirrels, quail, and pigeons for sure. I have seen unmistakable evidence of his kills. In one case it was a rosette of plucked squirrel fur, no carcass visible. I assume it must have been Iris because of the circular

few days during which I didn't see him. Iris will chase almost anything he can subdue. Goshawks are known to use people, cattle, even bears, by following them and waiting for the big animals to flush game, so our routine together ironically mimics what they would do anyway. They are unbelievably quick and agile. Iris flies through brush I have to crawl through.

Goshawks and their smaller cousins, Cooper's Hawks, are reputed to be, pound for pound, the fiercest raptors; either will go down a rabbit's hole to drag it out. The French refer to the goshawk as the Cuisinier because these birds won't stop hunting, even when full. Able to withstand extreme cold (they winter in Northern Minnesota), they will make a kill whenever they can. In a place like Northern Minnesota or in our own high country, for a gos to wait until he's hungry to start hunting will likely lead to death. In an extremely cold landscape, a goshawk's caloric requirements skyrocket, but at the higher elevations where goshawks are most likely found there just isn't much to eat in the winter. Most of their prey has migrated or hibernated. Therefore a gos will cache his food and return to it, as Iris does regularly. In very cold environments, a gos will return to brood his frozen cache until he can eat it. I found Iris doing this once when I handed him a frozen-solid quail. Like a laying hen, he sat on it for an hour or so before he broke into it.

My hope is that next spring Iris will make a nest and attract a mate. It seems he's becoming less and



Jon W. Anderson



imprinted on me, and Steve and I think that once he matures and finds a female I will certainly become his second choice. But neither Steve nor I really knows how our relationships with our hawks will change when our birds find their mates; no one has done what we're doing that we know of. The effect of a mate's presence is unknown, but we both suspect that the relationships with us will endure. This year Iris didn't make a nest even though I saw nest-building behavior: playing with sticks, picking them up and carrying them. Next year mating is much more likely, if Iris is still around and hasn't been killed by an owl or by West Nile Virus (a constant threat as I found out when I nursed and lost a sick sharp-shinned Hawk that was brought to me last fall).

This summer Iris shed his brown and white juvenile plumage and transformed into an adult with a black head, a white streak above his eyes, and a blue-black back and wings. He has a nearly white underwing and a fine gray pattern on his breast. His eyes are turning from yellow to orange, and will

I go down to Spring Creek with him and watch him play in the water, take a bath, drink and chase trout.

end up red in a year or two.

For now Iris usually comes home at least once a day. But he has occasionally been gone for up to a week, too. He probably killed something big, or there was a completely enticing female somewhere around. Some days when it seems he isn't very hungry, he just hangs out around the house looking to chase the cats or anything else that dares to move.

By February, after a good chase, I began settling with my back up against a pine and sitting with Iris on my knee. He pulls one of his legs up, a gesture of ease, and slowly but constantly watches, turning his head, scanning. We sit for about forty-five minutes, at peace together hearing the forest, I with my human ears, Iris with his keen bird ears. Finally when I get stiff and it turns dark, and I need to walk home, Iris flies off to his night perch in these mountains Steve Layman has described as the finest goshawk habitat he's ever seen.

It is now late August, and Iris has been free since last November. He comes in closer to six o'clock.

He's gaining weight, as he becomes a stronger, more mature flier. Iris is in superb condition, more fit than most wild birds because he always has enough to eat. If he's unsuccessful in his own hunting, I am his backstop. He's passed the "chase-anything" stage. Now he hunts silently and with lethal intent.

After we go on our outings together I go down to Spring Creek with him and watch him play in the water, take a bath, drink and chase trout (so far not successfully as they hide too fast for him). His new plumage is very elegant, like the finest imaginable gray herring bone Harris tweed on the breast and legs, and a head almost black with a prominent white stripe over the eye and going around the back of the head. His eyes are becoming more and more orange with every day that passes.

I don't know how long I will be able to have Iris's daily attention. For the present, anyway, Iris seems willing to spend time with me, to consider me his friend. Iris will probably come by tomorrow. If I decide to go for a walk, he'll come and find me.

If Iris finds you, though, even if he allows you closer than you'd believe is possible with a goshawk, there are many reasons I ask that you not feed him or interact with him. First, it's a felony to interact with a hawk unless one has a falconer's license, but more importantly he must only trust me these days, as there are people who might intentionally harm him or unintentionally kill him by feeding him the wrong things. He shouldn't get too used to people he doesn't know. I lose sleep worrying that he'll start in on someone's chickens and get shot, and the best way to make sure that doesn't happen is to keep him afraid of everyone but me.

Goshawks are spirits of the forest: secretive, reclusive, shy, and nearly invisible. Most people, even those who spend a lot of time in the woods,

have never even seen one. If they do it's usually only a fleeting glance at a goshawk flying away fast. So if Iris approaches, count yourself lucky and be content to watch.



All photos by Len Brackett.
Copyright Len Brackett.





Iris

For color photos, visit the YWI website at
WWW.YUBAWATERSHEDINSTITUTE.ORG





STRINGING THE PEARLS

BY BOB ERICKSON

Nineteen years ago Don and Mary Losure bought a 1920s bungalow in a working class neighborhood in St. Paul, Minnesota. It had a backyard of mown grass bisected by a sidewalk leading to a garage on the alley. The usual visitors wandered into the yard: a few chickadees, a cottontail rabbit or two, the occasional squirrel.

Then, four years ago, the Losures decided to put a small hole in the ground and fill it with water. It took an afternoon to hand dig the seven by five-foot pit with sides stepping down to narrow landings at 14, 24 and 36 inches. The couple lined it with a sheet of rubber then placed a few pots of aquatic native plants bought at a local nursery onto the landings. They turned on their hose and a few hours later they had a pond.

Winter soon arrived and the water froze solid. But when the ice went out in the spring, a pair of mallards appeared for a day, apparently for a “spot of rest” on the small body of water, as Don recalls. It was the first time he had ever seen a duck in his yard. “Then the toads moved in and began a week of mating croaks,” he said. “Tadpoles appeared a while later. Each spring the sound of the croaking became louder. We began having more butterflies, dragonflies and new birds. An egret and heron arrived to harvest a few of the toads.”

Some neighbors enjoyed the new sounds, Don said, but a few had to shut their windows during the spring serenade, which was so loud it kept them awake at night.



In its central location within the Yuba Watershed, the San Juan Ridge harbors some magnificent patches of remnant habitat: jewels that private landowners can play a key role in linking together like a string of pearls.

Habitat pearls

Don and Mary enhanced the habitat of their little urban homestead and have seen more and more wildlife each year since. Providing a boost like this is just one tier in efforts to preserve biodiversity. But to appreciate and maintain a healthy environment with a full complement of plant and animal species, we have to look at many landscape scales and time frames. In particular, providing some form of continuity between all of them is essential.

Looking beyond the backyard to a broader prospective we need to include such things as the migration of neo-tropical birds — one of the many groups of spring migrants that nest in our area — and the upslope/downslope seasonal movements of owls and deer.

Refugia, corridors, and the matrix of lands surrounding them (which includes public and private lands that are generally of lesser quality as habitat) all play a part in retaining the natural world. In its central location within the Yuba Watershed, the San Juan Ridge harbors some magnificent patches of remnant habitat: jewels that private landowners can play a key role in linking together like a string of pearls.

Old growth forest

I'd like to describe a number of old growth and mature forest pockets that still exist on the Ridge: forests that must be connected to allow for movement and dispersal of plants and animals. Old growth is just one habitat type of many that exist in our region, yet previous to European occupation,

mature forests covered more than half of the land between the South and Middle Yuba rivers, the land we today call the San Juan Ridge.

Now most of this old growth is gone, but what remains constitutes important habitat for a number of increasingly rare species. Spotted owls and goshawks, for example, prefer closed-canopy, large-tree forests for nesting. While both these species still inhabit the Ridge, another old-forest dweller, the fisher, is now extirpated.

Devil's Canyon

During much of the 19th and 20th centuries, the San Juan Ridge was subjected to extensive habitat destruction. The land was mined, forests were harvested and burned, roads and houses were built. The forest at Devil's Canyon is an excellent example of a remnant stand "from the old days before." This Forest Service land encompasses some 1,000 acres descending from Graniteville Road at the Cherry Hill lookout. At 5,000-foot elevation, our premier old-growth remnant is home to nesting spotted owls, white-headed woodpeckers, a healthy population of black bears, and, possibly, martens, bobcats and?

Malakoff Diggins State Historic Park

Despite the destruction of the past century and

a half, if we look at the Ridge now, we can find many tracts where habitat is slowly improving. Malakoff State Park's 3,000 acres of heavily mined land is now a showcase for the enormous restorative powers of nature. Even for those of us who have lived here only 40 years we can see the tremendous change

in the vegetation of the diggins at Malakoff. The forests around the deep pit are being allowed to return to old growth and as time passes this area will become a significant refugium for old-forest-loving plants and animals. Another gem.

Headwaters Spring Creek

In the upper reaches of the Spring Creek watershed and contiguous to Malakoff are Forest Service land, parcels of the BLM's 'Inimim Forest, and private parcels owned by residents supportive of conservation efforts. Backbone Road bisects these lands. Spotted owls nest here and a local biologist who lives here has documented that this small area has produced more than 40 pileated woodpecker young in the last 10 years. These fledglings have migrated to surrounding areas with less than optimal habitat. This is a good example of the manner in which refugia can function as a harbor for wildlife, fostering reproduction and providing a source of young which can take up residence in less



Shady Creek Corridor remote camera image taken October 2nd, 2009.

hospitable neighboring areas. Resilient lands in recovery becoming prime natural habitat: a sparkle of nature's color in the sands of the upper Yuba.

Long Ravine/Kadaheska

On the west side of Spring Creek along Kadaheska Road is a small but productive stand of large trees on one of the parcels of the 'Inimim Forest. This stand has been a nest site for spotted owls and a continuous roost site for 17 years as documented by me in annual surveys. It is another node in the fabric of old growth habitat on the San Juan Ridge.

Shady Creek corridor

Starting at Lonesome Lake in the North Columbia Diggins, the upper reaches of Shady Creek provide a band of high-quality riparian habitat that runs west for about a mile. It is home to a large number of accipiter nests, mostly Cooper's and sharp-shinned hawks, but now neighbors are seeing a few goshawks. Could this be Iris, the newly transplanted resident of Len Brackett's doings? Large trees and water here suggest continuity with the habitat of Spring Creek and Malakoff.



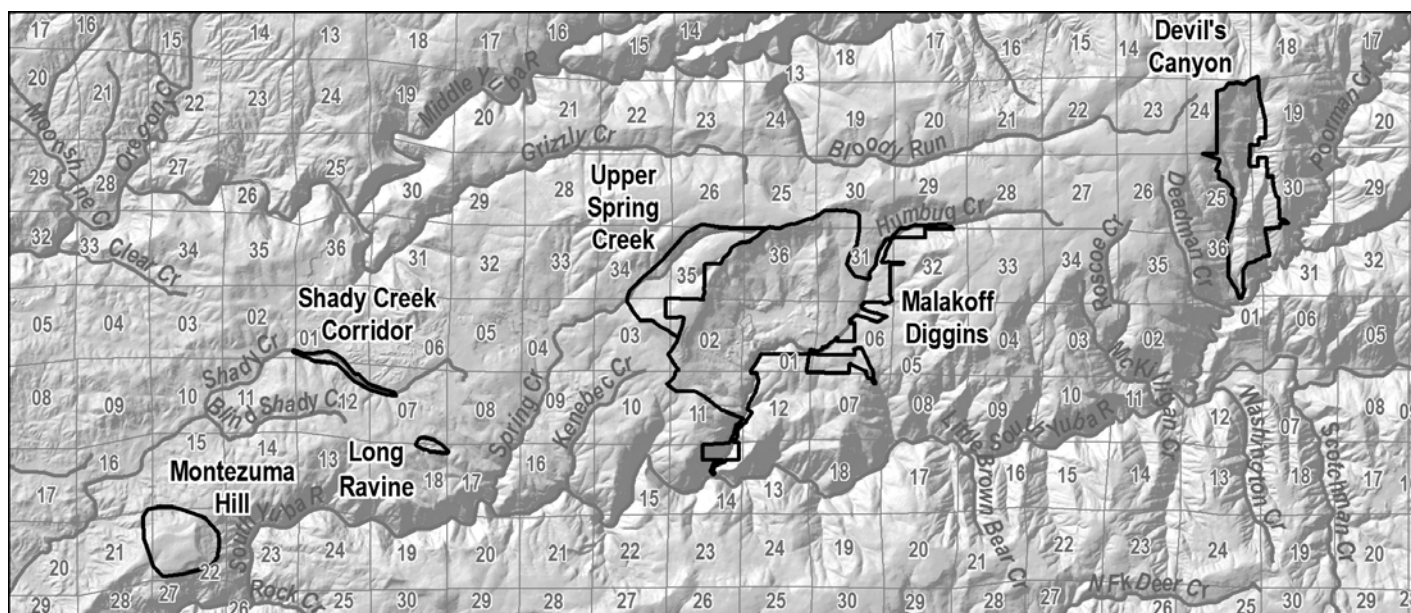
Sailor Meadow, June 2009.

Montezuma Hill

A group of large parcels owned by conservation-minded private landowners adjacent to the South Yuba River State Park and some small BLM parcels have kept much of Montezuma Ridge and Montezuma Hill area open as a model of ponderosa pine and black oak mature forest, stringing an important block into the necklace of pearls.

Linking it all together

These are just a few examples of areas of prime habitat in the Yuba watershed that could be biologically linked together by small and large



Map by Steve Beckwith

actions that could be taken by owners of “in-between lands.”

Leaving large trees, placing a log in a pond for basking pond turtles, increasing a zone of no activity in a riparian area, killing bull frogs, clearing around large trees to protect them from fire — these are just a few examples of what private land owners can do to re-connect and buffer the natural heritage of existing high quality habitat that is still present in our neighborhood.

Conservation easements — while not necessary — could formalize these efforts. I think it helps to think what this place could be like 10, 20, a hundred years from now. We are growing and maturing and preserving a natural world for all those to come.

Small acts can have a snowball effect and the Shady Creek Corridor mentioned herein is an example. With the creation of the ‘Inimim Forest in the early 1990s and its management plan for restoring old forest habitat a few years later, several parcels along upper Shady Creek that border the old North Columbia Diggins became the foundation for extending the riparian zone of this highly disturbed creek.

When a timber harvest was proposed that would have taken out most of the large diameter trees along the creek on Siskon Gold Corporation’s land, a movement was initiated by two local naturalists, David Lukas and Tavia Cathcart, to mitigate damage to the forest. The result was an agreement to remove the planned skid roads and timber harvest from the south side of the creek.

These acts then set the stage for the BLM to deny a request from a developer to open a road along the Shady Creek corridor for access to parcels he wanted to create. (A higher, drier, better road was available.) These precedents encouraged another private landowner to amend his timber harvest plan to protect the Shady Creek riparian areas from timber harvest activity. Removing this area from his plan included leaving a number of very large old growth trees. The Shady Creek Corridor was becoming real and meaningful. Private land

owners were seeing their land as an important part of a bigger fabric of conservation and their efforts as contributing to reducing the fragmentation of our neighborhood.

The snowball effect

I think it helps to think what this place could be like 10, 20, a hundred years from now.

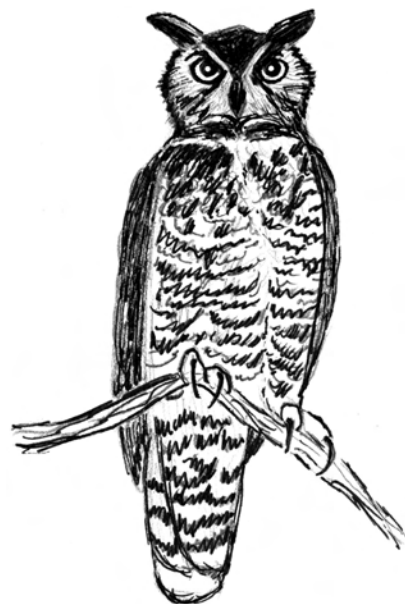
Don and Mary Losure spent an afternoon creating a small link in their neighborhood’s natural world. Within three years, two of their neighbors followed suit,

building their own ponds. Soon the din of the American toads’ mating songs became louder.

Now people living along upper Shady Creek are hearing the shriek of Cooper’s hawks and the cries of goshawks as more creatures keep moving into the area, revealing a thread of connection to forest habitat lands further up the Ridge.

As mammalogist Jim Halfpenny writes, “Linkage is the wave of the future and one of our best hopes not only for bears but also for all wildlife in the west.”

- Bob Erickson



THE NATURE OF THIS PLACE

2009 FALL CALENDAR



LIVING WILD AND LOCAL —AN EVENING OF NATIVE FOOD AND ART FROM THE PLANTS OF THIS PLACE

October 24, 2009, 4:00 PM to 6:30 PM.

Event hosted by the Living Wild Project at the Lodge at Camp Augusta

The native plants growing around us are a truly local and sustainable resource since they only use the rain for water needs, provide habitat corridors for wildlife, and offer food specific to the wild and human animals living in this place.

Join the Yuba Watershed Institute for an evening of food and art recognizing the environment around us. Watch wild-crafting demonstrations. Taste appetizers and desserts developed with native plants by the finest chefs in Nevada County and nominate your favorite recipe for the “Wild Chef Award.” Sip healthy homebrewed beer and wine made from wild plants. Experience the beauty of functional wild art through demonstrations, exhibits and sales by local artisans including: hand-crafted chairs, pottery made from native clays, jewelry from plants, baskets woven from Ceanothus, Cattail, and Pine Needle and traditional Maidu Indian crafts.

Proceeds support the educational activities of the Yuba Watershed Institute and the Tsi-Akim Maidu Tribe.

Tickets must be purchased in advance of the event! Space is limited, so reserve early.

YWI and Tsi-Akim Tribal Members \$35, General Admission \$40

SAVE THE BIG TREES OF THE 'INIMIM VOLUNTEER WORKDAY

November 14, 2009, 9:30 AM to 2:00 PM.

Meet at the North Columbia Schoolhouse Cultural Center

Join the Yuba Watershed Institute and the Bureau of Land Management in the people-powered removal of highly flammable ladder fuels from large diameter trees in Long Ravine in the 'Inimim Forest. Come experience draft horse logging techniques, demonstrated by Helen and Brent McDermott and their horse Mac, which could be applied on your own forested property to minimize ground disturbance and damage to residual trees. Please bring your own lunch, water, work gloves and hand tools (hand saws, loppers, etc.).

While this is a free event, we strongly encourage volunteer pre-registration.



FORAGING SKILLS WORKSHOP FOR EDIBLE AND MEDICINAL PLANTS -WITH INSTRUCTORS RACHEL AND MATT BERRY

November 21, 2009, 10:00 AM to 4:00 PM.

Meet at the North Columbia Schoolhouse Cultural Center

Do you know how many wild and feral edibles are in your foodshed? Want to be more self-sufficient and connected with nature by wildcrafting with plants for all your needs? We will spend the day uncovering the abundance of useful plants that surround us all. We will cover how to identify plants, their nutritional and medicinal values, strategies for enhancing wild food production and sustainable harvesting methods. We will have fun making wild weed energy bars, manzanita cider and a medicinal preparation. Potluck local/wild lunch to share at midday. We will be in the field all day. Pre-registration recommended.

YWI Members \$15.00
General Admission \$18.00

SACRED MUSHROOMS: PATHS IN HISTORY AND IN MYTH -PRE-EVENT EVENING SLIDESHOW PRESENTATION WITH DALE PENDELL

Friday, December 11, 2009, 7:30 PM.

The North Columbia Schoolhouse Cultural Center

Evening slideshow- \$7

THE 12TH ANNUAL FUNGUS FORAY

Saturday, December 12, 2009, 9:00 AM to 4:00 PM.

Field collection Saturday morning will wrap up with an afternoon display table assembly, discussions, presentations, identification workshops and an array of fungus-inspired activities for the whole family. Concessions and mushroom merchandise available for sale. Bring a lunch and be prepared to walk in the woods. Also useful: collection basket, waxed paper bags, knife, hand lens. Rain or shine event. It is not necessary to pre-register for this event.

\$22 general admission and \$18 for YWI members;
Half day- \$10
Under 18 Free

For more information, contact Daniel Nicholson 530/292.3589 or danmadrone@yahoo.com



For registration and general information, contact Tania Carlone, Executive Director, at
tania@yubawatershedinstitute.org or 530/265.4459.

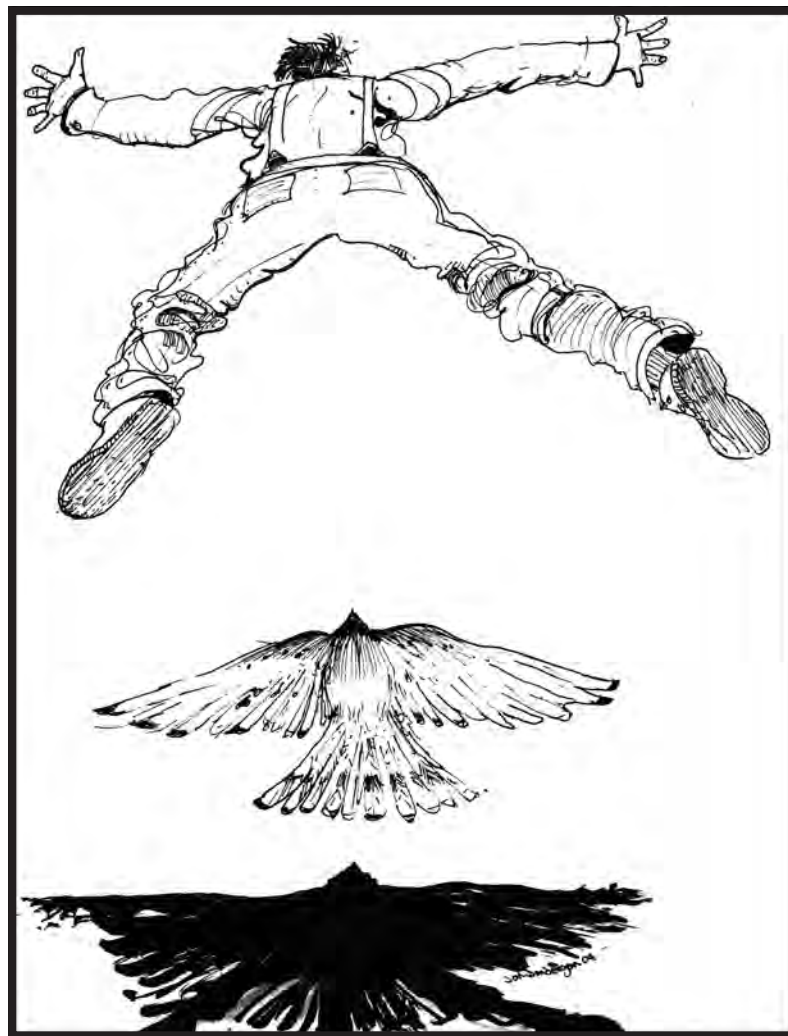
All photos this page by Bob Erickson

YWI BOARD OF DIRECTORS

Robert Erickson, President
Gary Parsons, Secretary
Daniel Nicholson, Treasurer
Wendy Boes
Leslie Guinan
Kurt Lorenz

Executive Director
Tania Carlone

Tania Carlone
Executive Director
Yuba Watershed Institute
P.O. Box 2198
Nevada City, CA 95959
530.265.4459
tania@yubawatershedinstitute.org
www.yubawatershedinstitute.org



JOIN YWI TODAY!

The YWI welcomes new members and volunteers. We need your support and involvement. Members receive Tree Rings and discounts to our The Nature of This Place programs. While donations of any size are welcome, annual membership dues are:

\$100 Forest Steward or Business Membership

\$50 Families

\$35 Individuals

\$20 Low Income and Students

Become a member On-line at www.yubawatershedinstitute.org
or send your check, made payable to the YWI, to
P.O. Box 2198, Nevada City, CA 95959.
All donations are tax deductible.



TREE RINGS

THE JOURNAL OF THE YUBA WATERSHED INSTITUTE

PO BOX 2198

NEVADA CITY, CA 95959

NON-PROFIT ORG.
BULK RATE
U.S. POSTAGE
PAID

Nevada City, CA 95959
Permit No. 68