

Nature Trails

Published by the Eugene Natural History Society

Volume Forty-five, Number One, January 2010



Rick Boatner, holding a Western Painted turtle (*Chrysemys picta bellii*), a native species now being pressured by the Red-eared Slider turtle (*Trachemys scripta elegans*), an invasive species.

**Mr. Rick Boatner, Invasive Species, Wildlife
Integrity Coordinator, Oregon Department of Fish
and Wildlife,**

**"Stop the Invasion! Invasive Wildlife in
Oregon"**

**Friday, 15 January 2010, 7:30pm, Room 100,
Willamette Hall, UO Campus**

What animal is about as smart as a chimpanzee (I heard an animal scientist on NPR say this), can weigh over five hundred pounds, has sharp tusks over three inches long, eats anything and lots of it, and tears up



Our speaker, in a patch of ground torn up by feral swine.

vast areas of ground? A pig. *Sus scrofa*. Wild pigs, or feral swine, are just one of Rick Boatner's nightmares, but not the biggest. In his position as Invasive Species, Wildlife Integrity Coordinator with the Oregon Department of Fish and Wildlife, Boatner's list of bad dreams is long and open-ended: feral swine, nutria (*Myocaster coypus*), Asian carp (multiple species), red-eared slider turtles (*Trachemys scripta elegans*), bullfrogs (*Rana catesbeiana*), northern snakehead (*Channidae* – a fish that can waddle over land, live out of water for five days, get 40 inches long, eat other fish – like trout – and can bite you!), zebra mussel, (*Dreissena polymorpha*), quagga mussel (*Dreissena polymorpha*), New Zealand mud snail (*Potomopyrgus antipodarum*)... it makes one wonder how the man copes.

Rich Boatner was born in Duluth, Minnesota. While a youngster his family moved all around the country. His love of nature began on his grandfather's farm in Arkansas, where he and his family did a lot of outdoor recreating. When he was twelve they moved from Texas to Oregon. That was also about the time he fell in love with wildlife biology. His biggest influences? Those two TV programs Wild Kingdom and American Sportsman. Jumping out of a helicopter onto the back of some large ungulate has fascinated more than one young boy, and Boatner thought such a life would be just the ticket.

After high school Rick worked for several years in the food industry, but his desire to work with wildlife was always there in the background. Eventually he enrolled at Western Oregon University and four years later, having continued working full-time to support his family while

taking full loads as a student, he finished with a degree in natural science.

Boatner's eighteen years with ODFW began with creel and spawning-ground surveys as a seasonal biologist in the fisheries program. When his first temporary appointment was about to close the Department hired him again – still on a seasonal basis, but this show of confidence was enough for him. He quit his 'real job' in the food business. He worked for seven years as a seasonal biologist on various projects on the Clackamas, Willamette and Columbia rivers.

One of the more interesting of these projects was sea-lion observation at Willamette Falls. They tried various methods to deter fish predation by the sea lions that had begun hanging around for the easy pickings by the fish ladder. He told a story about a sea lion up in Seattle that was causing a similar problem. They caught it and released it down around Astoria. A day later it was back. They caught it again and took it to San Francisco. This time it took a week to get back. They had to move it clear across the continent to Florida to get rid of it. Even though sea lions are not an invasive species this story does illustrate a couple of aspects of the invasive-species problem: first, these animals are persistent! And second, they are taking advantage of changes we have made in nature.

After being promoted to Fisheries Biologist Boatner worked for five years on the Willamette River Spring Chinook Program. Then he moved over to the Wildlife side of the Department, working as Assistant Wildlife Biologist, first in the North Willamette District, then in the South Willamette District, for a total of six years. A bit over a year ago he took on his present position.

With his principal concern now being invasive species, Boatner feels surrounded. He looks to California, which had around 1,500 feral swine in the 1950's and now has millions, and wonders if he can keep Oregon from the same fate. He looks at places where zebra and quagga mussels have taken over, like the Great Lakes and Lake Mead, and wonders how he can keep the catastrophic damage from happening in Oregon's waters (They aren't here yet, but their arrival would change our lives: fishing would disappear as a recreational activity; our electricity bills would go up; no more

walking barefoot on the beach). He sees the Asian carp and the northern snakehead ruining native aquatic life in other parts of this country and tries to come up with plans for dealing with these piscatorial problems if and when they cross our borders. The red-eared sliders are displacing our native turtles. Bullfrogs are decimating native frogs and snakes. Mud snails, Chinese mitten crabs... the list just keeps getting longer.

This is one important problem! It seems too big for one person, even for one division within ODFW. We all need to learn as much as we can about these invasive species, what we can do to help but most importantly, how we can avoid being part of the problem (or a bigger part of the problem – a good case can be made for *Homo sapiens* being the ultimate invasive species). So it behooves us all to come out to Mr. Boatner's presentation, "Stop the Invasion! Invasive Wildlife in Oregon", and to do our best to publicize it. His lecture is at 7:30 pm on Friday, 15 January 2010, in room 100, Willamette Hall, U of O campus. John Carter

Dormancy by Tom Titus

There will be no more chanterelles this year. A glorious fall that saved my late-blooming tomatoes and winter squash came to an abrupt end with a days-long Arctic chill that has frozen everything, including some of my pipes. When the next rains arrive, the few mushrooms that might still have been edible will melt quickly and quietly back into the duff. When the frozen petioles of thimbleberry and salmonberry thaw, the last yellow leaves that had hung gamely on into the early days of December will return to the earth. My meticulously collected vegetable seeds—lettuce, chard, corn, dry beans, tomatoes, squash, parsnips—are packed away, each with an embryonic plant lying curled within a nutritive layer of endosperm, waiting for the Light. I am in some ways relieved by the pervasive dormancy.

Daylight undergoes a final retrenchment in the days before the winter Solstice. Although this amounts to only a small change in total day length, the transfer of those last few minutes of light into growing darkness is like childbirth, where the final contractions require an extraordinary amount of energy. My spirit contracts also, as though I'm closing off the unused rooms of a once full house. Curling up, I retreat into the protective endosperm of my living

room, damper down my internal fire, parcel out a dwindling supply of energy to maintain a bed of soulful coals that can be fanned back to life by the lengthening days of February. This woodstove approach to overwintering can be tricky, though. Sufficient airflow must be maintained to keep the embers glowing, and care must be taken to avoid shutting things down too far and risk killing the fire. If the fire goes out altogether, the house becomes very cold, and building a new fire requires a prodigious effort.

Temperate plants and animals shut down, too, and have responded to the cold reality of these seasonal shifts in diverse and sometimes spectacular ways. My garden brassicas boost their sugar content, a sort of cellular antifreeze that, in a happy coincidence, makes them very tasty. Wood frogs freeze rock solid, heart stopped, fully capable of thawing and reanimating when sufficiently warm. Hibernating bears drop their pulse and body temperature in a prolonged sleep that parses out their fall fat reserves until spring returns with the promise of new food. These spectacular adaptations to seasonality overshadow the more visible and familiar buds, bulbs, seeds, bird flocks, and body fat that characterize most of our winter residents.

We humans, on the other hand, don't seem to belong in winter. Think about it. All of the current data strongly indicate that we evolved in the tropics. Our genetic heritage converges on Africa. We have profuse sweat glands, bipedalism, and little body hair, all tropical adaptations that quite possibly facilitated heat loss while running large prey into a state of thermal, and terminal, stress. Our physical attributes seem to have adapted only minimally to the demands of seasonality, especially cold, and are restricted primarily to changes in pigmentation and build. What we have done well is *thinking* our way into winter, inventing clothes, capturing fire, building shelter. Of course this mental discourse has now gotten completely out of hand; centralized energy provides 24-hour heating and lighting so that even colder-than-hell Minnesota now sports one of the largest shopping malls in the world—indoors. We have become *Homo sapiens kilowattus*.

Yet our technologically driven march into winter has extracted a price from many of us. Our brains are cued to the light. Received through our eyes, light stimulates circuits wired deep into our neurological core, stimulating the expression of a

variety of genes that ultimately produce a physiological feel-good cocktail of serotonin, melatonin, dopamine, and catecholamine. This system works pretty well at lower latitudes (think the Congo). But western Oregon is halfway between the equator and the North Pole, home to a chilly nine hours of overcast winter daylight. This is our place, where individual genetic architectures interact with weather, exercise, diet, and a host of other variables to produce a continuum of responses to light deprivation, from subclinical navel staring to full blown clinical and catastrophic depression. Some would rather negotiate the Mines of Moria than deal with the reality of another fog-choked, rain-spattered, sun-forsaken winter.

To make matters more challenging, most of us are locked indoors beneath artificial lighting, feverishly taking care of the new business of living—a job that pays the mortgage and tuition bills and provides a means for hunting and gathering at Market of Choice. As a result, these complex brains that were once used to escape from our tropical heritage are now working in overdrive to *think* our way *out* of winter. We have concocted a breathtaking array of medications; hot chocolate, hot toddies, melatonin, 5-HTP, and Prozac. We have light boxes and jet rides to sun-parched winter retreats such as Cabo and New Zealand. All contribute to a huge economy that profits from keeping us at the top of our game during a season when astronomy, our brain chemistry, and the entire living landscape are telling us to chill out and take a nap.

Perhaps we are trying too hard. In this pre-Solstice cold snap I've been wondering to what extent our so-called depression is really a seasonal disorder caused by a disconnect between the biological reality of winter and the very recent overlay of socioeconomic demands that require us to remain in constant motion. The annual tipping of the northern hemisphere away from the sun impacts every other living thing around us. Our place is blessed with cyclical, rhythmical changes in weather and sunshine, including a winter that draws us back into the dim light of the womb. Why fight it? My own work is to become as satisfied sitting next to the woodstove as I was cutting and stacking the wood in September.

So I suggest an addition to the lexicon of seasonality. How about Seasonally Mediated

Adjustment and Response Tactics? Because I'd rather be SMART than SAD any winter.

Barnyard bats by Reida Kimmel

One warm misty night early in November, I accidentally left the light on in the barn. It's a big light and illuminates both the horse stalls and the long roofed porch onto which the stalls open. A few hours later, Chuck came home. "Quick! You've got to see this! Come to the door and look at the barn." It could have been a scene from a science fiction movie. Looking through the stall door I saw glowing golden forms swiftly flying, weaving, passing along the length of the roofed area behind the barn. The sight was utterly beautiful, and the forms were bats, attracted to the insects, probably mostly moths, which had been lured into activity by the warm night and the abundant light. We estimated that there were at least three bats, perhaps more.

There are three bat houses on the south and east sides of the horse barn. All of them have inhabitants at least some of the time, but not all the houses are occupied every year. In addition, there are bat roosts somewhere in the garage, and from time to time, bats find homes inside the barn, in the walls of the hay storage area. Once, for several years we had a bat, though we never could find it, in the door to our pony's stall. Every night when we shut the pony in, it hissed and chattered. "Paloma's Bat", we called it. They were a well-matched pair. The pony was very cranky too. We are most aware of bats in the summer, flying over the pond and pasture every evening. Piles of droppings below the roosts tell us which of our bat houses are inhabited. We never peek for fear of causing a fatal disturbance, but we know there are babies, or at least one baby inside, because though bats mate in the fall, the females delay activating the gestation process until after winter. In spring they give birth to a single young, which they tend very carefully.

We live in the foothills of the Oregon Coast Range where ten species of bats occur. I must confess to extreme ignorance about the species of the bats we see on the farm. They are not the big brown bats, *Eptesicus fuscus* that we see along the North Fork of the Middle Fork of the Willamette River, while we are lazing away a summer day and evening. Those bats are really big, and sometimes even show themselves during the day.



ESD©2003

Our bats are small, almost certainly a species of *Myotis*, quite possibly the very common little brown *Myotis lucifugus*, but to identify the little creature, we would need a fresh corpse, which thankfully, we have never encountered. All bats are fascinating if not cuddly wild creatures. Their wing membranes are amazingly thin and stretch from their hind limbs to their 'fingertips'. This wing structure does not permit soaring flight, but enables a bat to maneuver up down and around very easily. Thus, when you see a bat, you are struck by its rather jumpy, flitting way of flying. Another membrane, distinct from the wing membranes, lies between a bat's hind legs. A bat can catch prey by mouth or in this membrane, and it is just a small bounce in flight while the bat retrieves and devours the tasty morsel. Bats are famous for their echolocation, but they can only achieve fine tuned prey perception at a distance of about a yard, which is another good explanation for their shifting and fluttering flight.

I looked up bats in The National Audubon Field guide to North American Mammals, trying to find out more about Oregon's bats, and was struck by the frequent mention of buildings as the roosting places for so many species of bats. Other preferred places are mines and caves. Now caves are natural places, and bats evolved in a world with caves. But mines and buildings? Nature lovers' bat houses? Before we cleared the land and built towns and cities, Western Oregon's bats frequented a natural habitat of forest and savannah, preferring to live in riparian areas. Where did they roost then? Are there any natural areas remaining for bat roosting, and if so of what

type? There have been studies of habitat and roosting published in the Journal of Wildlife Management that offer some food for thought. Humes, Hayes and Collopy, 1999, found that the bats they studied in the Coast Range foraged in significantly highest numbers in old growth timber stands. In forest plantations bats preferred thinned stands of timber to unthinned areas, except for very young tree plantings, seven to fourteen years old, in which they were very active. The key to understanding these findings might be that bats like to forage where there is space for maneuvering. Roosting preferences in the forests also favor old natural tree stands. Arnett and Hayes, 2008, found that the bats of the three species they studied favored conifer snags as roosts. Big brown bats and long-legged *Myotis [Myotis volans]* rarely roosted in snags less than forty years old, but long-eared *Myotis [Myotis evotis]* individuals were less choosy. The authors of both the papers were trying to find the best way to manage forests to provide suitable habitat for bats, and once again, the lesson learned is that we must work to preserve every remaining stand of old growth if we love bats [as well as everything else the ancient natural forest holds], and also to encourage commercial forestry practices that work towards producing 'new' old growth forests in the decades and centuries to come.

In the meantime, even if you live in town, and especially if you live near the river, buy or build a bat house. Bats are lots of fun, and they probably consume many more insects than those charismatic daytime hunters, the birds.

Opal Creek Ancient Forest Field Trip

The Eugene Natural History Society is sponsoring a two-night field trip to the Opal Creek Ancient Forest Friday through Sunday June 4-6, 2010. The Opal Creek Wilderness abuts the Bull of the Woods Wilderness and is the largest tract of contiguous low-elevation old growth forest in Oregon. Opal Creek Ancient Forest Center is located on Jawbone Flats at the confluence of the Little Santiam River and Battle Axe Creek. The Center comprises buildings remaining from the Shining Rock Mining Company and new cabins for housing visitors. Additional information about Opal Creek can be found on the website at www.opalcreek.org/default.aspx.

We will carpool from Eugene on Friday morning and then park at a locked gate for the easy three-mile hike to the Center through old growth forest along the Little North Santiam River. Gear will be transported by the Center from the gate. Van transportation from the gate will also be available for those unable to make the trip on foot. Cabins are beautiful, but bring your own bedding and be prepared to share a room.

The cost of the trip will be approximately \$70 per person for lodging for two nights. A meal plan for Friday dinner through Sunday lunch is optional at a cost of \$80. We have 16 beds reserved; thus, the trip will be guaranteed for the first 16 registrants. We will keep a waiting list of additional registrants and attempt to reserve additional lodging if interest in the trip is high and lodging is available. Payment for meals must be made in May. Deadline for registration and deposit is February 19, 2010. To register, make your nonrefundable check for \$70 per person payable to the Eugene Natural History Society and send to:

Judi Horstmann, Treasurer, Eugene Natural History Society, PO Box 3082, Eugene OR 97403

Questions? Email me at titus@uoregon.edu. Hope to see you in there!

Tom Titus

ENHS bike path work party. Sunday, 21 March. Meet at 10 am on North Bank Bike Path under the north end of Ferry Street Bridge, or in the parking lot in front of McMenamins North Bank restaurant off Centennial Loop. Families welcome; nature study entertainment provided. Bring gloves and be clothed for the weather. Work party usually lasts until about noon, after which many of us stay for lunch and conversation at McMenamins. Contact for info: David Wagner 541-344-3327.

Recording of Marzluff Talk. Because of the icy weather John Marzluff gave permission to record and reproduce his 11 Dec. talk, "In the Company of Crows and Ravens." It is available to ENHS and LCAS members on DVD for a donation to the speaker fund. Ask Dave Wagner at the next meeting, call him at 541-344-3327, or email him to have a copy made. This is just an audio recording but a DVD player is necessary to listen to it.

Events of Interest in the Community

Lane County Audubon Society

Tuesday, 26 January, 7:30pm. Eugene Garden Club, 1645 High St. A discussion of Christmas Bird Counts past and present, by Herb Wisner. In 1900 25 groups in the U.S. made the first count. Now, thousands of counts are made, not only in the U.S. but also in many other parts of the world.

Mount Pisgah Arboretum

34901 Frank Parrish Rd., Eugene, 97405. Located off I-5 Exit 189, 15 minutes southeast of Eugene. Call Peg Douthit-Jackson at 747-1504 or email mtpisgjp@efn.org for more information or to sign up for any of the following Arboretum activities.

Sunday, 24 January, 1-3pm. Winter Wonderland Family Walk. Tom Bettman leads this fun walk for all ages. We'll find and talk about all kinds of fascinating critters, from slugs and bugs to trees and shrubs. We'll also talk about why we can't always find them at this time of year and where they might be. Rain or shine. Meet at the Arboretum Visitors Center. Fee: \$5/adults, \$2/kids.

Saturday, 30 January, 10am-noon. Lichen Walk. Led by lichen expert Daphne Stone. Explore the symbiotic relationship between algae and fungi that creates lichens, and learn about their ecological importance in Oregon forests. All welcome. Rain or shine. Meet at the Arboretum Visitors Center. Fee: \$5.

Saturday, 6 February, 8am-10am. Winter Bird Walk. Led by Davey Wendt. Bring your binoculars. We will look for winter migrants such as Golden-Crown Kinglet, Varied Thrush, Fox and Lincoln Sparrows, and Golden and White Crown Sparrows. Rain or shine. Meet at the Arboretum Visitors Center. Fee: \$5.

Sunday, 14 February, 1-3pm. Life Among the Mosses Walk. Led by David Wagner. This walk will help you appreciate the elfin world of mosses, liverworts, and lichens. Rain or shine. Meet at the Arboretum Visitors Center. Fee: \$5.

Emerald Chapter of the North American Rock Garden Society

Saturday, 16 January, 1pm. Wildflowers, Volcanoes and Lakes: It's Chile in December. Eugene Garden Club, 1645 High St. Tanya Harvey will share photos of the beautiful flowers and scenery of the Andes from Santiago to the Lake District of Chile and Argentina. The meeting is free and open to the public. Door prizes and refreshments follow. Call Tanya at 937-1401 with questions.

WREN For more information on the following activities call 683-6494.

Tuesday, 12 January, 9-10am. Wetland Wander at Checkermallow Access. The Checkermallow site is located on the south side of Royal Ave between Greenhill and Terry St. We will be walking along the paved Fern Ridge Bike Path. Free! WREN will provide binoculars. For more information call 683-6494 or email info@wewetlands.org

Nearby Nature

Pre-registration required and space is limited for these programs. Call 541-687-9699 or email info@nearbynature.org. (Online? Click [here](#) for registration forms.)

Saturday, 16 January, 9am-noon. Lessons in the Learnscape Workshop -- City Chickens and Other Critters. Meet outside the Alton Baker Park Host Residence. Discover how you can start and care for an urban flock of chickens or rabbits. Learn about breed selection, housing requirements, and using manure to maximize soil fertility. Instructors: Kris and Walt from [Ruby and Amber's Organic Oasis](#), an organic farm that features working draft horses Ruby and Amber.

Monday, 18 January, 8:30am-3pm. No School Day Program: Fur, Feathers, and Fat. Learn about the ways animals survive the wet and chilly weather. Search for animal signs, hear nature tales, and play hibernation games. Great fun for kids ages 6-9. Maximum 12 kids. Meet at the Nearby Nature Yurt in Alton Baker Park. Cost: \$30 members/\$35 non-members. **Monday, 15 February, 8:30am-3pm. No School Day Program: Green Machines.** Learn about earth-friendly power. Create model wind turbines and mini cars that run off batteries. Build boats to race and discover how to cook with sunlight. Ages 6-9. Maximum 12 kids. Meets at the Nearby Nature Yurt in Alton Baker Park. Cost: \$30 members/\$35 non-members.

North American Butterfly Association

Monday, 1 February, 7:00 refreshments, 7:30pm presentation. Bee All That You Can Bee! Pollinator Gardening for the Masses. EWEB Training Center 400 E. 5th, Eugene. Come and experience this show on our local pollinators, the plants they need, and local garden tips.

Emerald Chapter, Native Plant Society of Oregon

Monday, 11 January 11, 7:30pm. Flora of Steens Mountain in Southeastern Oregon. EWEB Training Room, 500 E. 4th Ave., Eugene. Dave Predeek shows slides of alpine flora growing on this isolated, fault-block mountain in Oregon's high-desert region. Call 541-345-5531.

Monday, 8 February, 7:30pm. Sand Mountain Fire Lookout. EWEB Training Room at 500 E. 4th Ave., Eugene. Don Allen gives us historical information and tells of efforts to protect the site from damage.

We welcome new members! To join ENHS, fill out the form below. You will receive *Nature Trails* through December of next year. Membership payments allow us to give modest honoraria to our speakers, as well as to pay for the publication and mailing of *Nature Trails*.

MEMBERSHIP FORM

Mail checks to **Eugene Natural History Society**
P.O. Box 3082, Eugene OR 97403

Name _____

Phone _____

Address _____

E-mail (optional) _____

City _____ State & Zip _____

ANNUAL DUES:	Contributing	20.00
	Family	15.00
	Individual	10.00
	Life Membership	300.00

Generosity is Appreciated

Do you have any special experience in natural history? _____

Would you like to organize/lead field trips? _____

Teach informal classes? _____

Work on committees? _____

What natural history topics interest you for future talks? _____

ENHS Schedule of Speakers and Topics 2009-2010

15 January - Rick Boatner – Wildlife Biologist: " Stop the Invasion: Invasive Wildlife in Oregon"

19 February - Greg Retallack – Geologist: "Past Climate Crises"

19 March - Sue Beilke – Herpetologist: "Native Turtles of Oregon; How these Ancient Species Are Faring in Modern Times"

16 April - Dean Walton -- Ecologist, Science Librarian: "Freshwater Tidal Swamps of the Atlantic Coast"

21 May - Pat Kennedy – Ecologist: "Can Cows and Birds Coexist in NE Oregon?"

ENHS OFFICERS AND BOARD MEMBERS 2008–2009

President: Tom Titus titus@uoneuro.uoregon.edu 484-4477

First Vice President: Melody Clarkson jmclarkson@q.com 334-6883

Second Vice President and Immediate Past President: David Wagner davidwagner@mac.com 344-3327

Secretary: Reida Kimmel <rkimmel@uoneuro.uoregon.edu>

Treasurer: Judi Horstmann

Board: Ruth BreMiller, John Carter, John Fentress, Rebecca Hazen, Pete Helzer, Evelyn McConnaughey, Marge Zane

Nature Trails: Editor, John Carter, jvernoncarter@comcast.net 349-2439;

Support Staff, Ruth BreMiller and Reida Kimmel

Eugene Natural History Society
P.O. Box 3082
Eugene, Oregon 97403

FIRST CLASS MAIL