

Naturalists

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In the Native Plant Garden



The native plant garden is about to receive a rejuvenation of caring and planning energy. We have entered into a collaboration with the Washington Native Plant Society local chapter, where they will provide leadership in the garden in terms of maintenance, planting and a vision of the garden. Rob Stevens, Sandy Bowman and I toured the garden with Native Plant Society people and they had many good ideas, and furthermore know how to maintain native plants and gardens. Leadership will come from George Macomber.

The warmer than usual winter is producing some surprises. The first violet was seen poking up and the red flowering current is in early flower (much earlier than most years). We will have work parties at the garden, led by the Native Plant Society and we will be invited to participate, with a major focus on planting and pruning. Some new plantings will be made and native seed experimented with. Check out the garden. It is just by the climbing rocks on the north end of the Seattle clubhouse.

Upcoming Workshop Naturalist Leadership Training



FEBRUARY 22-24

Join us February 22-24 for this 2 day, 1 evening intensive course (3 lectures and 2 half day local field trips)to learn the skills and knowledge to successfully lead Naturalist Hikes and field trips for the Introduction to the Natural World course. This course is

open to members from all branches. Our goal is to train new leaders to grow and strengthen our programs by helping you become a Naturalist Leader, leading naturalist hikes on your own, or to become a Field Trip Instructor for our Introduction to the Natural World course. You will be provided help and mentoring along the way, along with opportunities to be an assistant leader and/or co-leader as you learn and gain confidence.

Preference will be given to candidates that have graduated from the Introduction to the Natural World course and/or are members of the Naturalist Study Group. We will also consider candidates that have outside experience that makes them familiar with plant and bird identification.

January Naturalist Hikes

SNOHOMISH RIVER SPENCER ISLAND AND TULALIP BAY BIRDING









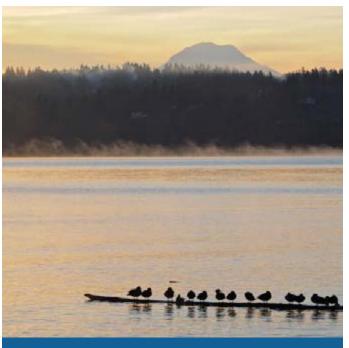
Lanham lake snowshoe trip, led by John Bell, identified 9 species of conifers



Vashon Island Birding



Fox sparrow



Union Bay Natural Area and Magnuson Park

January Hikes (Continued)

NISQUALLY WILDLIFE RESERVE – TOM BANCROFT



Trumpeter swans at Montlake

PHOTOS BY RONIQ BARTANEN



Cooper's hawk at Montlake – here's looking at you



Ponds galore



Cedar waxwing



Golden crowned sparrows

Upcoming Hikes

Sign up online under Explore, Find Activities and check exploring nature (or click the register buttons below).

The mountain hiking season is nigh upon us, and we nats have many offerings to enjoy.

Old Sauk Trail #1

This is a Naturalists Exploring Nature Activity to discover mosses, lichens and other plants on the Old Sauk Trail along the Sauk River.

Register Here

Old Sauk Trail #2

This is a Naturalists Exploring Nature Activity to discover mosses, lichens and other plants on the Old Sauk Trail along the Sauk River.

Register Here



Hansville Greenway

FEBRUARY 9 - GORDIE SWARTZMAN

We will combine a winter woods hike in Hansville reach with birding there, at the Nature Conservancy Site on Hood canal and at Point No Point, all in the Hansville area on the Kitsap peninsula. This is prime moss and birding season.

Register Here



Whidbey Island West Shore

FEBRUARY 20 – STEWART HOUGEN

Whidbey Island is a great place to look at Puget Sound's glacial history and, at the same time, view ducks wintering in the area. We will visit 2 or three Whidbey islands sites in all.

Register Here

2018-19 Naturalists Lecture Series

Free to Naturalist Study Group members, public welcome – donation



FEBRUARY 13, 2019 (WED) | CHRISTIAN A SIDOR, PH.D.

Fossils From the Bottom of The World: Paleontology at the Shackleton Glacier Camp

Chris is Associate Director of Research and Collections Burke Museum and Professor of Biology UW. He will take us on a visual journey to the spectacular landscapes of the Trans-antarctic mountains where the Triassic rocks he's studying are exposed, as we learn what it's like to do fieldwork in Antarctica.

More Info

MARCH 13, 2019 (WED) | GOVINDA ROSLING

Pigeon Guillemots: A Seabird That Measures The Health of The Salish Sea

Govinda's photo rich account of their life cycle, behavioral habits, quirks and antics will entertain as she explains the Pigeon Guillemot Research Group's 15 year study and why it's important.

Central Puget Sound Chapter/Washington Native Plant Society Program



On the Hunt for True Bogs: Making Sense of Jargon to Find a Common Understanding of Washington's Peatland Types

THURSDAY, FEBRUARY 7, 2019, 7:00PM, JOE ROCCHIO

Seattle Program Center, 7700 Sand Point Way N.E., Seattle Refreshments, Public Invited, Admission is free. Donations are appreciated! Doors open at 6:00 PM for the Native Plant Identification Workshop; Program begins at 7:00 PM

What is a bog? Are there bogs in Washington State? Like many common names for ecosystems, the term 'bog' has a varied history of use and meaning in both a scientific and nontechnical context. This results in miscommunication about conservation values, hydrological settings, management issues, and regulatory guidance.

In this presentation, the distinctions between bog and other peatland types will be explored along with a discussion of the regional factors controlling peatland distribution and the ecological drivers affecting the composition and structure of vascular and nonvascular species. The role human use and management has played in the development of Washington's peatlands will be briefly explored. The Washington Natural Heritage Program utilized this information as the foundation for classifying Washington's peatland types.

A primary objective of the classification is to develop a standardized terminology to characterize Washington's peatland types and thus provide clarity to wetland regulatory definitions, more resolution to peatland conservation priorities, and ecologically informed restoration and management guidance. We will review the classification approach and discuss the various peatland types found across Washington State, with emphasis on those peatlands found in the Puget lowlands.

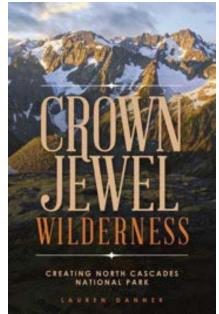
Joe Rocchio is the Senior Vegetation Ecologist for Washington Department of Natural Resources, Natural Heritage Program (WNHP). His primary responsibilities are to maintain a statewide ecosystem classification, develop and implement methods to assess ecological integrity, and identify ecosystem conservation priorities. Although he works with all of Washington's ecosystems, wetlands (especially peatlands) are his expertise. His passion for peatlands began during his undergraduate schooling, when Joe had an opportunity to visit Pinhook Bog at Indiana Dunes National Lakeshore. He was fascinated by the bog's unique flora and stunned that something so ancient still existed within his childhood landscape of northwest Indiana. This interest led Joe to the University of Washington, where his graduate research focused on peatland restoration in western Washington. He then spent nine years as the Colorado Natural Heritage Program's Wetland Ecologist where he conducted inventories for rare and high-quality wetlands, with an emphasis on fens. Since joining WNHP in 2007, a significant portion of his work has focused on Washington's peatlands. He developed a statewide classification of Washington's bogs and fens, conducted statewide inventories of high-quality peatlands, and recently initiated research to study the effects of surrounding land use on the vegetation, hydrological regime, and water chemistry of western Washington bogs. Joe has a B.S. in Environmental Science from Indiana University and M.S. in Ecosystem Analysis from the University of Washington.

Crown Jewel Wilderness: Creating North Cascades National Park

TUESDAY, FEBRUARY 12, 2019, 7:00PM, LAUREN DANNER

Bellevue Botanical Garden, Aaron Education Center Refreshments, Public Invited, Admission is free.

Politics and the wilderness movement of the 1950s and 1960s shaped North Cascades National Park out of some of the wildest, most remote country in the United States. In fact, the North Cascades is a window into the birth of the modern environmental movement in the Pacific Northwest, as well as a reminder that national parks are not only scenic



landscapes of national significance, but political entities, created through negotiation and compromise. The park's 50th anniversary last year gavejm the perfect opportunity to explore this story, and Lauren Danner traces the fascinating narrative of Washington state's third crown jewel national park, including how its creation helped lead to the founding of the Washington Native Plant Society.

Lauren Danner, PhD, is a writer and historian based in Olympia, Washington. She focuses on public lands policy, Pacific Northwest and environmental history, and outdoor recreation. A former college professor, museum director and Washington State field coordinator for the Lewis and Clark bicentennial, she now writes at: laurendanner.com

Upcoming Programs:

- 3-7-19 Ray Larson "The Flora of Seattle in 1850: Major Species and Landscapes Prior to Urban Development
- 4-4-19 Jon Bakker On prairies, The Mountaineers, Cascade Room
- 4-9-19 Donovan Tracy "The Alpine Flowers of Mount Rainier," Bellevue Botanical Garden, Aaron Education Center
- 5-2-19 Andy MacKinnon On the role of endophytic fungi in the production of plant chemicals, The Mountaineers, Goodman Room

Washington Native Plant Society Study Weekend – Bays Bogs and Balds

MAY 17-19, 2019

The Salal Chapter invites you to join other WNPS members in exploring the lowland flora of Skagit and Island Counties, a geologically and climatically diverse area, in prime wildflower season. The base will be the Fidalgo Bay Resort in Anacortes on Fidalgo Island (access by bridge). Anacortes is the jumping off place for ferries to the four largest San Juan Islands and to Vancouver Island, so you may want to plan an extended trip. There will be about 30 fieldtrips, 15 each day, many with stunning views. Sites will include beaches, bogs, and balds in Anacortes parks and community lands, Deception Pass State Park (on both Whidbey and Fidalgo), central Whidbey, Samish Island, and mainland areas including Padilla Bay, home of a National Estuarine Research Reserve that manages and protects more than 11,000 aces of intertidal and upland habitat and the second largest eel grass bed in the United States.

Register Here After January 12th

Odds & Ends

Naturalist facebook group:



The Facebook Group is a group of Mountaineers who have a passion for the natural world and want to learn more about it.

It is called The Mountaineers Naturalist Group. It is open to Mountaineers Members who are affiliated with the Naturalist Program, either as a current or past student of the Intro to the Natural World course or as a member of the Naturalist Study Group. It provides a place for

UW sponsored Washington Biological Symposium

MARCH 6, 2019

An extensive network of professional, academic, and amateur botanists are actively engaged in the conservation, management, and study of Washington's diverse flora. Their members to share photos of their hikes and trips, as well as to help with identification of species.

People can search for it on Facebook and ask to join. If they are a current member of The Mountaineers and affiliated with the Naturalist Program, they will be added.

The group is open only to Mountaineers Members as it helps us build camaraderie among our members. (There are many other Facebook groups open to all such as the Washington Native Plant Society and Western Washington Birders.).

expertise ranges from how best to manage biodiversity, to understanding climate change impacts on plant communities, to naming and classifying the flora's rare, common, and invasive elements. Invited speakers and poster presentations will share new insights and discoveries about these topics and more.

Register Here

Mountaineers Leader E-Learning – FREE!

If you are interested in becoming a Mountaineers leader, there is a leadership e-training course available. Check it out!

Register Here

Edible Plants Workshop

Many of us aware of the edibility of a small number of plants. Yet so many plants are edible and tasty. Join Stewart Hougen for a workshop on edible plants, this coming April April 18th with a field trip to Eastern Washington somewhere on Saturday April 20. There will be two additional field trips throughout the summer. Priority will be given to workshop participants. You will be amazed at all the common plants that are edible and Stewart will provide tips on how to prepare these. Save the dates.

Poetry

Mary Oliver, nature poet extraordinaire, died this past month and these poems honor her.

LAST NIGHT THE RAIN SPOKE TO ME

by Mary Oliver

Last night the rain spoke to me slowly, saying, what joy to come falling out of the brisk cloud, to be happy again in a new way on the earth! That's what it said as it dropped, smelling of iron, and vanished like a dream of the ocean into the branches and the grass below.

Then it was over. The sky cleared. I was standing under a tree. The tree was a tree with happy leaves, and I was myself, and there were stars in the sky that were also themselves at the moment at which moment my right hand was holding my left hand which was holding the tree which was filled with stars and the soft rain – imagine! imagine! the long and wondrous journeys still to be ours.

CLIMBING THE CHAGRIN RIVER

by Mary Oliver

We enter the green river, heron harbor, mud-basin lined with snagheaps, where turtles sun themselves--we push through the falling silky weight striped warm and cold bounding down through the black flanks of wet rocks--we wade under hemlock and white pine--climb stone steps into the timeless castles of emerald eddies, swirls, channels cold as ice tumbling out of a white flow-sheer sheets flying off rocks, frivolous and lustrous, skirting the secret pools-cradles full of the yellow hair of last year's leaves where grizzled fish hang halfway down, like tarnished swords, while around them fingerlings sparkle and descend, nails of light in the loose racing waters.

CLAPP'S POND

by Mary Oliver

Three miles through the woods Clapp's Pond sprawls stone gray among oaks and pines, the late winter fields

where a pheasant blazes up lifting his yellow legs under bronze feathers, opening bronze wings;

and one doe, dimpling the ground as she touches its dampness sharply, flares out of the brush and gallops away.

By evening: rain. It pours down from the black clouds, lashes over the roof. The last acorns spray over the porch; I toss one, then two more logs on the fire.

How sometimes everything closes up, a painted fan, landscapes and moments flowing together until the sense of distance say, between Clapp's Pond and me vanishes, edges slide together like the feathers of a wing, everything touches everything.

Later, lying half-asleep under the blankets, I watch while the doe, glittering with rain, steps under the wet slabs of the pines, stretches her long neck down to drink

from the pond three miles away.

CATBIRD

by Mary Oliver

He picks his pond, and the soft thicket of his world. He bids his lady come, and she does, flirting with her tail. He begins early, and makes up his song as he goes. He does not enter a house at night, or when it rains. He is not afraid of the wind, though he is cautious. He watches the snake, that stripe of black fire, until it flows away. He watches the hawk with her sharpest shins, aloft in the high tree. He keeps his prayer under his tongue. In his whole life he has never missed the rising of the sun. He dislikes snow. But a few raisins give him the greatest delight. He sits in the forelock of the lilac, or he struts in its shadow. He is neither the rare plover or the brilliant bunting, but as common as the grass. His black cap gives him a jaunty look, for which we humans have learned to tilt our caps, in envy. When he is not singing, he is listening. Neither have I ever seen him with his eyes closed. Though he may be looking at nothing more than a cloud it brings to his mind several dozen new remarks. From one branch to another, or across the path, he dazzles with flight. Since I see him every morning, I have rewarded myself the pleasure of thinking that he knows me. Yet never once has he answered my nod. He seems, in fact, to find in me a kind of humor, I am so vast, uncertain and strange. I am the one who comes and goes, and who knows why.

Will I ever understand him? Certainly he will never understand me, or the world I come from. For he will never sing for the kingdom of dollars. For he will never grow pockets in his gray wings

GANNETS

by Mary Oliver

I am watching the white gannets blaze down into the water with the power of blunt spears and a stunning accuracy-even though the sea is riled and boiling and gray with fog and the fish are nowhere to be seen, they fall, they explode into the water like white gloves, then they vanish, then they climb out again, from the cliff of the wave, like white flowers-and still I think that nothing in this world moves but as a positive power-even the fish, finning down into the current or collapsing in the red purse of the beak, are only interrupted from their own pursuit of whatever it is that fills their bellies-and I say: life is real, and pain is real, but death is an imposter, and if I could be what once I was, like the wolf or the bear standing on the cold shore, I would still see it-how the fish simply escape, this time, or how they slide down into a black fire for a moment, then rise from the water inseparable from the gannets' wings.

AT GREAT POND

by Mary Oliver

At Great Pond the sun, rising, scrapes his orange breast on the thick pines, and down tumble a few orange feathers into the dark water. On the far shore a white bird is standing

like a white candle or a man, in the distance, in the clasp of some meditation while all around me the lilies are breaking open again from the black cave of the night. Later, I will consider what I have seen what it could signify what words of adoration I might make of it, and to do this I will go indoors to my desk -I will sit in my chair -I will look back into the lost morning in which I am moving, now, like a swimmer, so smoothly, so peacefully, I am almost the lily almost the bird vanishing over the water on its sleeves of night.

A Note on Trumpeter Swans By Thomas Bancroft



The low-pitched trumpet came from behind us. Turning, I spotted two large white birds that then flew right over us. Their translucent flight feathers glowed in the early morning sun. Their wingspan, more than 6-foot, created a moving shadow across Fir Island. Long white necks extended in front of solid bodies, and elephantine black legs and feet were tucked tight against their underside. More than 25 pounds each, these Trumpeter Swans flew with grace, style, and dignity.

The pair circled the field a quarter mile east of our location, then set their wings, dropped their black feet, and landed without a stumble among several hundred swans. A few trumpets and calls drifted toward me from the crowd. Most of these largest of North America's waterfowl seemed to be resting on the green grass. The trachea in these birds is more than three-feet long, about a half inch in diameter, and has a volume three to four times what one might expect for a bird this size. The trachea folds back and forth in the chest and creates the resonating chamber for this beautiful call that caught my attention.



In the summer of 1968, I flew with my sister from Pennsylvania to Yellowstone National Park. Finding a Trumpeter Swan was a priority, I wanted to be able to brag to my high school birding buddies about the western birds we discovered, including this rare swan. Populations of Trumpeter Swans were decimated in the 1800s and early 1900s. They were shot for their skins, flight feathers, and undoubtedly meat. In 1935, only 69 birds were known to exist, although probably some undiscovered flocks occurred in remote parts of Canada and Alaska. In 2005, a continent-wide survey estimated that the population had grown to more than 34,000 birds, a conservation success. Stopping the hunt and protecting habitat were critical, but also the birds adapted to wintering on agricultural lands, accessing novel food items. In winter, lead poisoning and collisions with power lines are now the major mortality issue. These birds looked stunning through my spotting scope. Dirty gray full-grown cygnets accompanied many pairs. We had seen half a dozen flocks of similar size already that morning. In 1968, my sister and I searched Yellowstone for several days and found only two individuals. They swam on the far side of a

small river, and our view was through thick vegetation.

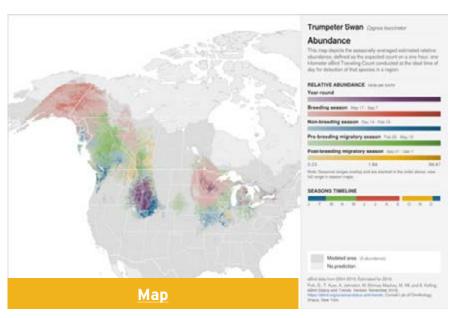
Managers have introduced the species into several eastern states where they now breed. A few even winter in birding spots that I visited in Western Pennsylvania and Ohio as a high school student. Scientists at Cornell Laboratory of Ornithology have analyzed eBird data to provide a much more refined abundance map than are currently available in birding guides or on other websites.

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It shows that the Salish Sea and south into Oregon are important wintering areas for our west coast population. These birds then migrate through British Columbia to breeding grounds in Canada and Alaska. The Central Rockies population has expanded substantial from the range in 1968, and birds are found in a band from the northern prairies across the Great Lakes.

A pair and two full-grown gray cygnets began running, head and neck extended, while flapping their wings. They quickly became airborne, banking to the left while climbing up over the flock, before turning to fly north away from us.

See: Fink, D., T. Auer, A. Johnston, M. Strimas-Mackey, M. Iliff, and S. Kelling. Ebird Status and Trends. Version: November 2018. https://ebird.org/science/status-andtrends. Cornell Lab of Ornithology, Ithaca, New York.



Mosses and Liverworts

An interview with Gary Brill

This is the second in a series of 4 articles on Mosses & Liverworts.

Reporter: I sat down with Gary Brill to discuss the differences between Mosses and Liverworts on Wednesday, January 23rd.

Reporter: Good morning and thanks for taking the time to agree to speak with me.

Gary: You're welcome. It really isn't much of an inconvenience, as I talk to myself fairly often, anyway, especially when photographing Mosses and Liverworts, or when viewing an incredible scene or sunset in nature.

Reporter: One thing that I would like to understand better is the difference between Mosses and Liverworts. Can you enlighten our readers?

Gary: Well first, both Mosses and Liverworts are bryophytes - as are Hornworts, although the exact relationships are still debated. But they are categorically distinguished from the other land plants; green algae, and vascular plants, such as trees, ferns, and flowering plants. The bryophytes are distinguished primarily in two ways: "First, in all bryophytes the ecologically persistent, photosynthetic phase of the life cycle is the haploid, gametophyte generation rather than the diploid sporophyte; bryophyte sporophytes are very short-lived, are attached to and nutritionally dependent on their gametophytes and consist of only an unbranched stalk, or seta, and a single, terminal sporangium. Second, bryophytes never form xylem tissue, the special lignin-containing, water-conducting tissue that is found in the sporophytes of all vascular plants." (Southern Illinois University). We think of the gametophyte as the Moss, Liverwort, or Hornwort; which is the familiar green bryophyte, from which the sporophyte arises. In the following image, mosses (Bryum), some with sporophytes, are visble upper left and lower left; the flat surface with umbrella-like male sexual structures, and ribbed female sexual structures represent the Liverwort, Marchantia polymorpha; and to the lower right, the lance-shaped structures is a Hornwort.

Read more of Garry's Interview



Claopodium crispifolium showing the sporophyte and perisome teeth



Lophocolea cuspidata

Photos Mosses, Liverworts and Lichen Workshop

These photos were at the workshop on Jan. 24th and on the hike on Jan. 26th by Anita Elder.







Tube Lichen



Lung Lichen



Tom looks closely at some mosses



Looking through a loupe helps reveal the type of moss.

(Continued on next page)



Gary Brill identifing different lichens





Maggie looking at some cat-tail moss



Frog Pelt Lichen



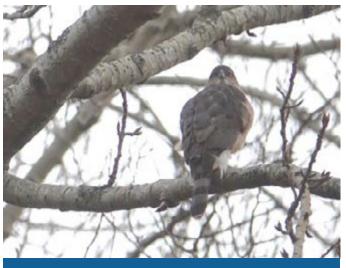
Twig with four different kinds of lichen on it

The Eye of Donna Hahn These photos were taken in Yesler Swamp, Union Bay

and Magnuson Park.



Ruby crowned kinglet



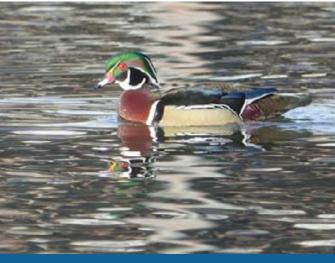
Coopers hawk



Great blue heron



Lincoln sparrow



Wood duck



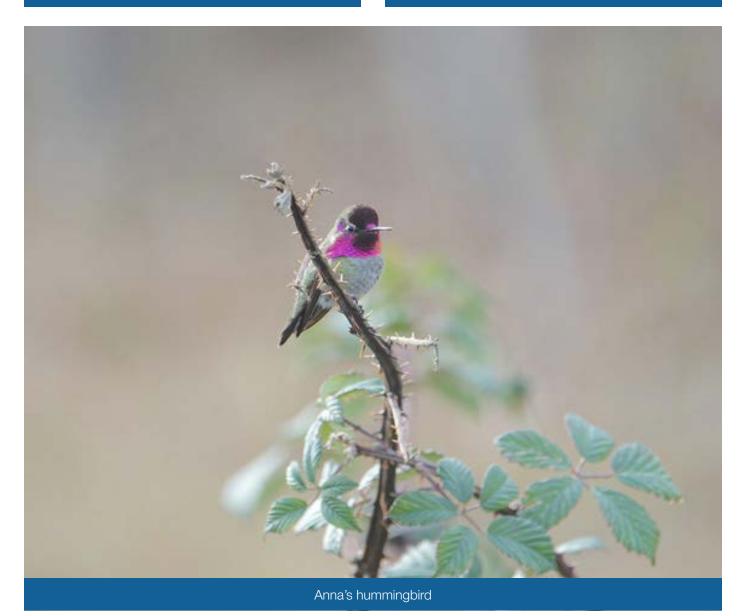
Double crested cormorant



Song sparrow



Yellow rumped warbler





Seattle Naturalists Committee Officers and Subcommittee Chairs

Committee Chair	Gordie Swartzman	g.swartzman@gmail.com
Committee Co-Chair	Tom Bancroft	gtbancroft@gmail.com
Study Group Coordinator	Stewart Hougen	sehougen@comcast.net
Secretary/Treasurer	Danielle Graham	pedergraham@gmail.com
Native Plant Garden Co-Chair	Rob Stevens	dlibfrom@yahoo.com
Native Plant Garden Co-Chair	Sandy Bowman	bowman@seanet.com
Website Page	Maggie Willson	maggienum@yahoo.com
Newsletter Layout	Anita Elder	anita@anitaelder.com

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