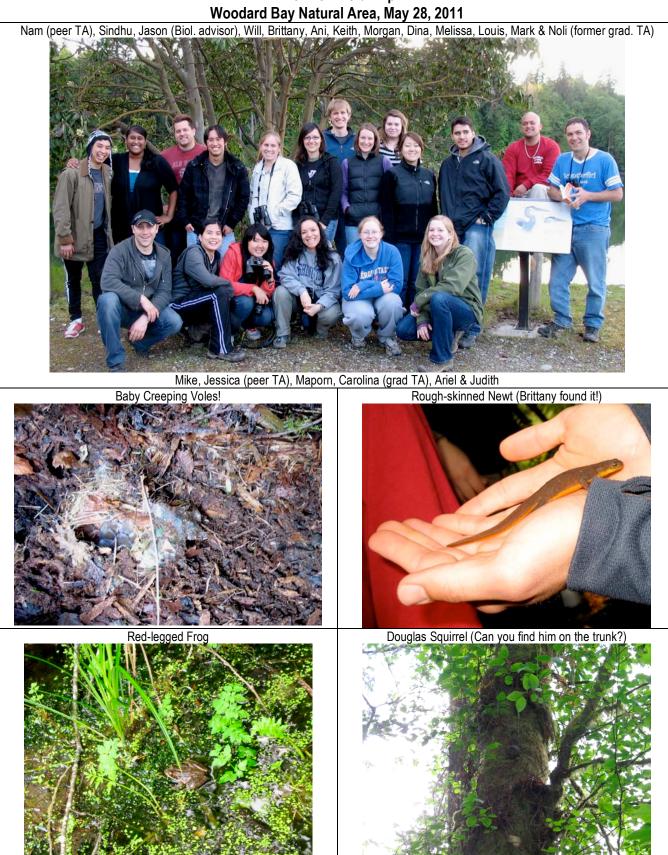
Biol. 452 Field Trip



acken Fern: <i>Pteridium aquilinum</i> vord Fern: <i>Polystichum munitum</i> tive perennial flowers that we identified: <u>estern Trillium: <i>Trillium ovatum</i></u> amflower: <i>Tiarella trifoliate</i> cific Waterleaf: <i>Hydrophyllum tenuipes</i> nging Nettle: <i>Urtica dioica</i> roduced weeds that we identified: rb-Robert: <i>Geranium robertianum</i> ant Hogweed: <i>Heracleum mantegazzianum</i> malayan Blackberry: <i>Rubus discolor</i>	Native trees & shrubs that we identified: Douglas Fir: Pseudotsuga menzeisii Western Red Cedar: Thuja plicata Western Hemlock: Tsuga heterophylla Grand Fir: Abies grandis Red Alder: Alnus rubra Beaked Hazelnut: Corylus cornuta Bigleaf Maple: Acer macrophyllum Salal: Gaultheria shallon Evergreen Huckleberry: Vaccinium ovatum Red Elderberry: Sambucus racemosa Common Snowberry: Symphoricarpos albus Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
ant Hogweed: Heracleum mantegazzianum nord Fern: Polystichum munitum tive perennial flowers that we identified: estern Trillium: Trillium ovatum amflower: Tiarella trifoliate cific Waterleaf: Hydrophyllum tenuipes nging Nettle: Urtica dioica roduced weeds that we identified: rb-Robert: Geranium robertianum ant Hogweed: Heracleum mantegazzianum malayan Blackberry: Rubus discolor	Western Red Cedar: <i>Thuja plicata</i> Western Hemlock: <i>Tsuga heterophylla</i> Grand Fir: <i>Abies grandis</i> Red Alder: <i>Alnus rubra</i> Beaked Hazelnut: Corylus cornuta Bigleaf Maple: <i>Acer macrophyllum</i> <u>S</u> alal: <i>Gaultheria shallon</i> Evergreen Huckleberry: <i>Vaccinium ovatum</i> Red Elderberry: <i>Sambucus racemosa</i> <u>Common Snowberry: <i>Symphoricarpos albus</i></u> Indian Plum: <i>Oemleria cerasiformis</i> Salmonberry: <i>Rubus spectabilis</i> Thimbleberry: <i>Rubus parviflorus</i> Cascara: <i>Rhamnus purshiana</i> Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,
ant Hogweed: Heracleum mantegazzianum nord Fern: Polystichum munitum tive perennial flowers that we identified: estern Trillium: Trillium ovatum amflower: Tiarella trifoliate cific Waterleaf: Hydrophyllum tenuipes nging Nettle: Urtica dioica roduced weeds that we identified: rb-Robert: Geranium robertianum ant Hogweed: Heracleum mantegazzianum malayan Blackberry: Rubus discolor	Western Red Cedar: <i>Thuja plicata</i> Western Hemlock: <i>Tsuga heterophylla</i> Grand Fir: <i>Abies grandis</i> Red Alder: <i>Alnus rubra</i> Beaked Hazelnut: Corylus cornuta Bigleaf Maple: <i>Acer macrophyllum</i> <u>S</u> alal: <i>Gaultheria shallon</i> Evergreen Huckleberry: <i>Vaccinium ovatum</i> Red Elderberry: <i>Sambucus racemosa</i> <u>Common Snowberry: <i>Symphoricarpos albus</i></u> Indian Plum: <i>Oemleria cerasiformis</i> Salmonberry: <i>Rubus spectabilis</i> Thimbleberry: <i>Rubus parviflorus</i> Cascara: <i>Rhamnus purshiana</i> Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,
tive perennial flowers that we identified: <u>estern Trillium: Trillium ovatum</u> amflower: Tiarella trifoliate cific Waterleaf: Hydrophyllum tenuipes nging Nettle: Urtica dioica roduced weeds that we identified: rb-Robert: Geranium robertianum ant Hogweed: Heracleum mantegazzianum malayan Blackberry: Rubus discolor <u>ants underlined mark the FEW that were NOT</u> used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Grand Fir: Abies grandis Red Alder: Alnus rubra Beaked Hazelnut: Corylus cornuta Bigleaf Maple: Acer macrophyllum Salal: Gaultheria shallon Evergreen Huckleberry: Vaccinium ovatum Red Elderberry: Sambucus racemosa Common Snowberry: Symphoricarpos albus Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
estern Trillium: Trillium ovatum amflower: Tiarella trifoliate cific Waterleaf: Hydrophyllum tenuipes nging Nettle: Urtica dioica roduced weeds that we identified: rb-Robert: Geranium robertianum ant Hogweed: Heracleum mantegazzianum nalayan Blackberry: Rubus discolor	Red Alder: <i>Alnus rubra</i> Beaked Hazelnut: Corylus cornuta Bigleaf Maple: <i>Acer macrophyllum</i> Salal: <i>Gaultheria shallon</i> Evergreen Huckleberry: <i>Vaccinium ovatum</i> Red Elderberry: <i>Sambucus racemosa</i> <u>Common Snowberry: Symphoricarpos albus</u> Indian Plum: <i>Oemleria cerasiformis</i> Salmonberry: <i>Rubus spectabilis</i> Thimbleberry: <i>Rubus parviflorus</i> Cascara: <i>Rhamnus purshiana</i> Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,
amflower: <i>Tiarella trifoliate</i> cific Waterleaf: <i>Hydrophyllum tenuipes</i> nging Nettle: <i>Urtica dioica</i> roduced weeds that we identified: rb-Robert: <i>Geranium robertianum</i> ant Hogweed: <i>Heracleum mantegazzianum</i> nalayan Blackberry: <i>Rubus discolor</i> <u>ants underlined mark the FEW that were NOT</u> used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Beaked Hazelnut: Corylus cornuta Bigleaf Maple: Acer macrophyllum Salal: Gaultheria shallon Evergreen Huckleberry: Vaccinium ovatum Red Elderberry: Sambucus racemosa Common Snowberry: Symphoricarpos albus Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
cific Waterleaf: <i>Hydrophyllum tenuipes</i> nging Nettle: <i>Urtica dioica</i> roduced weeds that we identified: rb-Robert: <i>Geranium robertianum</i> ant Hogweed: <i>Heracleum mantegazzianum</i> malayan Blackberry: <i>Rubus discolor</i> <u>ants underlined mark the FEW that were NOT</u> used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Bigleaf Maple: Acer macrophyllum Salal: Gaultheria shallon Evergreen Huckleberry: Vaccinium ovatum Red Elderberry: Sambucus racemosa Common Snowberry: Symphoricarpos albus Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
nging Nettle: <i>Urtica dioica</i> roduced weeds that we identified: rb-Robert: <i>Geranium robertianum</i> ant Hogweed: <i>Heracleum mantegazzianum</i> malayan Blackberry: <i>Rubus discolor</i> <u>ants underlined mark the FEW that were NOT</u> used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Salal: Gaultheria shallon Evergreen Huckleberry: Vaccinium ovatum Red Elderberry: Sambucus racemosa Common Snowberry: Symphoricarpos albus Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
roduced weeds that we identified: rb-Robert: Geranium robertianum ant Hogweed: Heracleum mantegazzianum nalayan Blackberry: Rubus discolor ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Evergreen Huckleberry: Vaccinium ovatum Red Elderberry: Sambucus racemosa <u>Common Snowberry: Symphoricarpos albus</u> Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
roduced weeds that we identified: rb-Robert: Geranium robertianum ant Hogweed: Heracleum mantegazzianum nalayan Blackberry: Rubus discolor ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Red Elderberry: Sambucus racemosa <u>Common Snowberry: Symphoricarpos albus</u> Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
rb-Robert: <i>Geranium robertianum</i> ant Hogweed: <i>Heracleum mantegazzianum</i> nalayan Blackberry: <i>Rubus discolor</i> ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Common Snowberry: Symphoricarpos albus Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
ant Hogweed: <i>Heracleum mantegazzianum</i> nalayan Blackberry: <i>Rubus discolor</i> ants underlined mark the FEW that were NOT sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Indian Plum: Oemleria cerasiformis Salmonberry: Rubus spectabilis Thimbleberry: Rubus parviflorus Cascara: Rhamnus purshiana Dull or Long-leaved Oregon Grape: Mahonia nervosa cans for tools & other building materials, food &/or medicines,
nalayan Blackberry: <i>Rubus discolor</i> ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of th	Salmonberry: <i>Rubus spectabilis</i> Thimbleberry: <i>Rubus parviflorus</i> Cascara: <i>Rhamnus purshiana</i> Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,
ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Thimbleberry: <i>Rubus parviflorus</i> Cascara: <i>Rhamnus purshiana</i> <u>Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,</u>
ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	Cascara: <i>Rhamnus purshiana</i> Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,
ants underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of th	Dull or Long-leaved Oregon Grape: <i>Mahonia nervosa</i> cans for tools & other building materials, food &/or medicines,
nts underlined mark the FEW that were NOT used by Native Americ sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	cans for tools & other building materials, food &/or medicines,
sed on information from Pojar, J. & A. MacKinnon. 1994. Plants of the	
	e Pacific Northwest Coast. Lone Pine Press.
Eq. Ingian Plum: http://www.plant-materials.	
Browse the WTU Herbarium Image C http://biology.burke.washington.edu/	
Possible Northern River Otter tracks:	Possible Mink tracks:
CONTRACTOR OF STREET	
The second se	
A CONTRACT OF A CONTRACT.	
	and the second sec
	and the second of the second
	and the second second
	and the second sec
	and the second se
	and the second and the second
The state has removed a section linking the old trellis to land.	Checking out the tiny sculpins along the shoreline.
to take up	A A A A A A A A A A A A A A A A A A A
	Marking and a second
and the second second second	
THE STATE	A
	ALL .

Woodard Bay Natural Area Field Trip, Species List (as seen & heard by Biol. 452 class) May 28, 2011 Low tide 10:10AM, 1.1 ft & High tide 5:10PM 11.2 ft (Henderson Inlet, which includes Woodard Bay); Sunset 8:55PM, Bats around 9:15PM

Low tide 10:10AM, 1.1 ft & High tide 5:10PM 11.2 ft (Henderson Inlet, which includes Wo Class Actinopterygii	
Order Scorpaeniformes	Tidepool Sculpin
Class Amphibia (Lissamphibia)	
Order Caudata	Rough-skinned Newt
Order Anura	Red-legged Frog
	Pacific Chorus Frog (heard)
Class Mammalia	
Order Lagomorpha Learn about the Easter cottontail in WA: <u>http://wdfw.wa.gov/wlm/living/rabbits.htm#species</u>	Eastern Cottontail (Introduced)
Order Rodentia	Beaver (lodge, freeway median)
Learn about Creeping Voles: <u>http://www.mnh.si.edu/mna/image_info.cfm?species_id=177</u> &	Douglas Squirrel
see a photo: http://www.pbase.com/cokesmith/image/121208925	Creeping Vole (+ babies in nest)
Order Chiroptera	Little Brown Bat – couldn't confirm
Learn about Yuma Myotis: http://www.batcon.org/index.php/all-about-bats/species-profiles.html	Yuma Myotis
Order Carnivora	Northern Raccoon (tracks)
Compare my otter & mink track photos with these:	Mink (tracks??)
http://northernbushcraft.com/animalTracks/otter/notes.htm & http://www.bear-tracker.com/mink.html	Northern River Otter (tracks)
	Harbor Seal
Class Aves	
Order Pelecaniformes	Double-crested Cormorant
Order Anseriformes	Canada Goose
	Common Merganser
Order Ciconiiformes	Great-blue Heron
Order Charadriiformes	Glaucous-winged Gull
Order Falconiiformes	Osprey
	Red-tailed Hawk (along I-5)
Order Columbiformes	Mourning Dove
Learn about Band-tailed Pigeons:	Band-tailed Pigeon
http://www.seattleaudubon.org/birdweb/bird_details.aspx?value=search&id=236 Order Coraciiformes	Poltad Kingfisher
Order Coracinomies Order Piciformes	Belted Kingfisher Northern Flicker (Noli saw one)
Order Piciformes	
Order Passeriformes	Pileated Woodpecker ("big" tree holes)
Order Passernormes	Steller's Jay (heard) American Crow
Learn about Wilson's Warblers & listen to their call:	
http://www.seattleaudubon.org/birdweb/bird_details.aspx?value=search&id=399	Wilson's Warbler
	Purple Martin (+ nest boxes)
	Violet-green Swallow
	Tree Swallow
	Barn Swallow
	Black-capped Chickadee (heard)
	Brown Creeper (Noli saw one)
Learn about the Brown-headed Cowbird's unusual breeding behavior:	American Robin
http://www.seattleaudubon.org/birdweb/bird_details.aspx?value=search&id=446	Spotted Towhee
	Red-winged Blackbird
Learn about the Golden-crowned Sparrow:	Brown-headed Cowbird
http://www.seattleaudubon.org/birdweb/bird_details.aspx?value=search&id=425	Song Sparrow
	Golden-crowned Sparrow
	White-crowned Sparrow
	American Goldfinch