The Confederated Tribes of Siletz Indians: Incorporating Traditional Knowledge and Western Science to Conserve and Restore Native Habitats

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Wildlife Program Biologist
Outline

• History of the Confederated Tribes of Siletz Indians
• Natural Resource Department
• Environmental Philosophy and Integrating Traditional Ecological Knowledge
• Willamette Wildlife Mitigation Project
Confederated Tribes of Siletz Indians
Aboriginal Lands

Elkhorn homelands in Washington not shown, though Elkhorn ancestry is recognized in the CTSI

Ancestral Areas

Miles

0  25  50
27 tribes encompassing over 4,000 individuals and at least 10 languages
<table>
<thead>
<tr>
<th>County</th>
<th>Main Town</th>
<th>Membership</th>
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</thead>
<tbody>
<tr>
<td>Marion</td>
<td>Salem</td>
<td>592</td>
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<tr>
<td>Multnomah</td>
<td>Portland</td>
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<tr>
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<td>270</td>
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<td>Clackamas</td>
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<tr>
<td>Benton</td>
<td>Corvallis</td>
<td>58</td>
</tr>
<tr>
<td>Yamhill</td>
<td>McMinnville</td>
<td>50</td>
</tr>
<tr>
<td>Douglas</td>
<td>Roseburg</td>
<td>10</td>
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</tbody>
</table>
Natural Resource Department

- Forestry, Environmental Planning, Biological Programs, ~16 people
- Biological Program – Fisheries/aquatic biologist, wildlife biologist, shellfish biologist, technicians and seasonals
- Currently hiring a freshwater biologist
- Planning to add a restoration biologist
Natural Resource Department

• Past and ongoing projects
• Forest management on timber lands
• Wide variety of biological studies – bay clams, native oyster restoration, endangered species surveys and monitoring (marbled murrelet, spotted owl, red tree vole), lamprey and salmonid population studies
• Outreach and education – culture camp, healthy traditions
Habitat Restoration

- In-stream habitat enhancement
- Invasive species identification and removal
- Wetland Management Plan
- Watershed hydrological modeling, coordinating restoration activities
Traditional Ecological Knowledge (TEK)

“The indigenous people of the world possess an immense knowledge of their environments, based on centuries of living close to nature. Living in and from the richness and variety of complex ecosystems, they have an understanding of the properties of plants and animals, the functioning of ecosystems and the techniques for using and managing them that is particular and often detailed...people’s knowledge and perceptions of the environment, and their relationships with it, are often important elements of cultural identity”
Traditional Ecological Knowledge (TEK)

• Oral history that encompasses a wide range of environmental information
• Historic events – tsunami in 1700, earthquakes
• Timing and use of native plants and animals – when to hunt what species, timing of fish runs
• Land Management – use of fire in the Willamette Valley
Fire in the Willamette Valley

- Late summer and early fall burns
- Produced verdant plant growth and promoted deer and elk habitat
- Programs similar to those practiced by Oregon's first peoples are now being used
Honorable harvest – never take the first one, ask permission, listen for the answer, take only what you need, use everything that you take, minimize harm, be grateful, share what you’ve taken, reciprocate the gift
The main difference between Indigenous knowledge and Western science is that for Indians, the knowledge is personal, and with it comes a responsibility

Indigenous environmental philosophy deals with the question, what is our responsibility in return for the gifts of the earth
Strategies for Tomorrow

Traditional ecological knowledge - embedded in oral history, ceremony cycle, specific language

Tribal, state, and federal law and policies

Biological program and expertise, predicted and measured responses to changing climate, land use

Outreach and education, youth involvement, maintenance of a sense of place

Community

Policy

Science
The potential of dynamic segmentation for aquatic ecosystem management: Pacific lamprey decline in the native lands of the Confederated Tribes of Siletz Indians

The Lamprey Eel Decline project conducted by the Confederated Tribes of Siletz Indians (CTSI) combined traditional ecological knowledge, scientific research and geographic information science. CTSI wanted to learn why the Pacific lamprey (*Lampetra tridentata*), a culturally and ecologically important species, was declining in the streams within their native land area. The project included interviewing native elders, characterizing stream habitat, monitoring water quality, creating a geographic information system (GIS) and educating tribal members on the cultural and ecological importance of the Pacific lamprey.
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**Duh-neh**: the people of the place

- Indian tribes are place-based societies
- Native people reached the Willamette Valley 8,000-9,000 years ago
- *Duh-neh*: “This is the one place where a person is from, where all the people all the way back are from, where the ancestors are buried. This is the only place, the heart place. There can be no other place.”
  
  – Charles Wilkinson
Confederated Tribes of Siletz Indians
Ancestral Tribes and Homelands

[Map of Siletz Tribes and Homelands]

[Image of acorns]

[Image of acorns in a basket]

[Image of hands processing acorns]

Legend:
- Willamette Valley
- Original Siletz Reservation
- Ancestral Tribes & Homelands
Confederated Tribes of Siletz Indians
Ancestral Tribes and Homelands

[Map showing regions of ancestral territories]

[Image of purple flowers]

[Image of Indigenous person picking roots]

[Legend showing map colors: Willamette Valley, Original Siletz Reservation, Ancestral Tribes & Homelands]
Confederated Tribes of Siletz Indians
Ancestral Tribes and Homelands
Culturally Important Species

- Deer
- Elk
- Salmon
- Cedar
- Pileated woodpecker
- Eagles, hawks
- Chitum (cascara)
- Salal
- Tarweed
- Bear grass
- Mountain tea
- Hazel
- Tule
- Junkus
- Maiden hair fern
- Lamprey
- Steelhead
- Crawdad
- Waterfowl
- Woodwardia
- Berries (huckleberry, blackberry)
- Moss/lichens
- Mushrooms
- Wood sorrel
- Northern flicker
- Willow
- Cattails
Landscape Level View

• The “landscape that fed the people”
• Goal isn’t to emphasize one resource over another, instead to bring the land back into balance
• Cultural and resource restoration
• Members out interacting with their landscape
Willamette Wildlife Mitigation Program

- Willamette Valley habitats – oak woodlands, prairies/grasslands
- Habitat Loss: 66%
- Percent in Effective Conservation: 1%
Partnerships & Collaboration

• Tribe can provide: technical assistance, acquiring funding (grant writing, letters of support), work groups/camps in the summer for restoration/trail building activities, school group and summer camp help and education/outreach material development and presentation
Youth Corps and Work Programs

- Northwest Youth Conservation Corps

- Tyee Program – Tribal Youth Employment Experiences
Burn Program and Heavy Equipment

• Currently putting Natural Resource staff through burn training and heavy equipment operation

• Would like to utilize controlled burns to conservation properties in the valley and created meadows on coastal properties
Land Acquisition

• To preserve high quality habitat
• Provide opportunities to Tribal members and youth
• Maintain open, working landscape
• Assist partners and collaborators by leveraging conservation funds, expanding protected areas, and providing technical skills
Habitat preservation, conservation, and restoration to maintain cultural and ecological integrity
Nuu-wun srxii-xe xuu-srxii-xe hii-chu xuu-srxii-xe hii-chu xaa-ma

For our children, their children and their children
• **Broken Treaties, An Oregon Experience**

• OPB | March 20, 2017 9 p.m. "Broken Treaties" introduces viewers to Oregon's Native American tribes and explores a thread of the Oregon story that hasn't been told very well over the years.