The Social Impacts of Fire Exclusion

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Karuk traditional management co-created the mid-Klamath region ecosystem as we know it.

The exceptional biological diversity of the mid Klamath River region of Northern California has emerged in conjunction with sophisticated Karuk land management practices, including the regulation of the forest and fisheries through ceremony and the use of fire (Kimmerer and Lake 2001, Lake, Tripp and Reed 2010, Salter 2003, Anderson 2005, Anderson 2006).
Culture and ecology are interconnected

• Karuk tribal members have responsibilities to tend to and care for the food and cultural use species they consider as relations.
“Without fire the landscape changes dramatically. And in that process the traditional foods that we need for a sustainable lifestyle become unavailable after a certain point. So what that does to the tribal community, the reason we are going back to that landscape is no longer there.” Ron Reed
Therefore the alteration of ecosystem through fire exclusion has profound social impacts

- Creates *denied access to traditional foods*
- Denied access to *spiritual practices*
- Puts *cultural identity* at risk
- Infringes upon *political sovereignty*
- On a more individual level altered forest conditions from fire exclusion create *social strain* for the individuals who hold the responsibilities to tend to specific places and to provide food to the community for subsistence as well as ceremonial purposes.
Denied Access to Traditional Foods

Over three quarters of Karuk foods enhanced by fire

<table>
<thead>
<tr>
<th>Some Important Karuk Forest Foods Enhanced by Fire</th>
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<tbody>
<tr>
<td>Black Tail Deer</td>
</tr>
<tr>
<td>Roosevelt Elk</td>
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<tr>
<td>Squirrel (Western Grey)</td>
</tr>
<tr>
<td>Tan Oak</td>
</tr>
<tr>
<td>Dwarf Tan Oak</td>
</tr>
<tr>
<td>Hazel</td>
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<tr>
<td>White Oak</td>
</tr>
<tr>
<td>Canyon Oak</td>
</tr>
<tr>
<td>Black Oak</td>
</tr>
<tr>
<td>Evergreen huckleberry</td>
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<tr>
<td>Tan Oak Mushroom</td>
</tr>
</tbody>
</table>
Decrease in Subsistence Food

% of People Eating Subsistence Food
In Past verses today

“As a child”  

2005
Health Impacts of Altered Diet: Karuk Tribal Disease Rates

• Diabetes: 20.1%
  – (U.S. national average: 4.9%)
• Heart disease: 39%
  – (U.S. national average 11.5%)
• Obesity: 37%
• Childhood Obesity: 48%
Fire Exclusion Puts Cultural Identity At Risk
Mental Health Impacts

• The reduced ability of Karuk people to participate in traditional management negatively affects both the mental health of individuals and generates a level of chronic community stress.

• “Role stress is a disjunction or inconsistency in the system of roles, so that normal obligations cannot be met... Role stress produces role strain, which is the frustrating sense of not being able to understand or meet the normal expectations of one’s roles” (1989, p. 15).

(Mirkowsky & Ross, 1986; 1989; Gill & Picou, 1998; Erikson, 1994).
Altered forest conditions from fire exclusion create **social strain** for the individuals who hold the responsibilities to tend to specific places and to provide food to the community for subsistence as well as ceremonial purposes.
Fire exclusion impacts political sovereignty

- Reduced access to places in the landscape

Photo: California Indian Basketweavers Association
Percent of Households Questioned/Harrassed by Game Wardens While Gathering for Subsistence or Ceremonial Purposes Karuk Tribe, 2005
Fire fighting activities have social impacts as well

- Emergency mode from high intensity fires
- Impacts to cultural sites
- Interruption of subsistence and cultural activities
- Lack of local decision making or recognition of local knowledge, local community values
- Threats to political sovereignty

Questions?