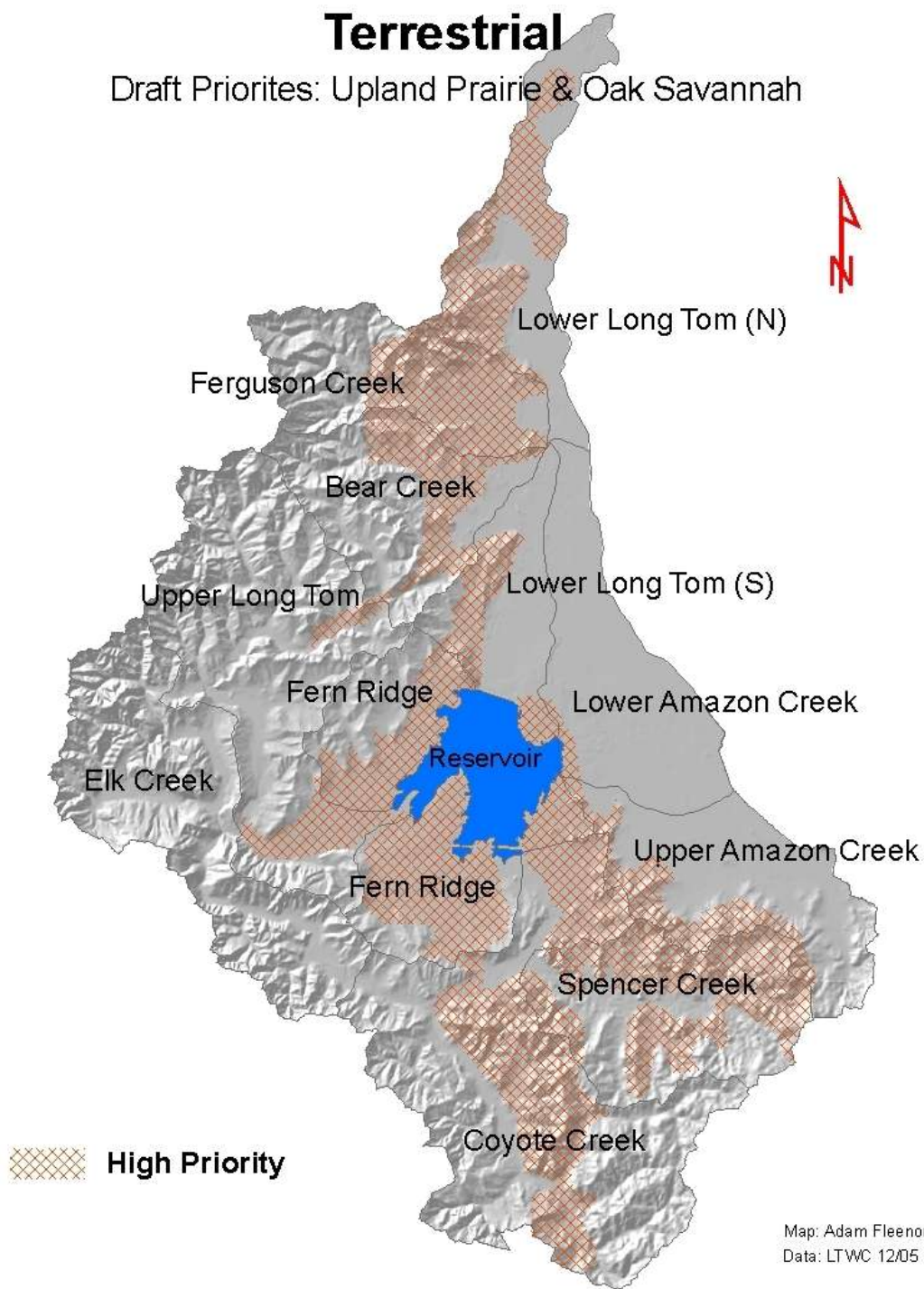


Terrestrial

Draft Priorities: Upland Prairie & Oak Savannah



Connecting Wildlife Habitat across the Landscape

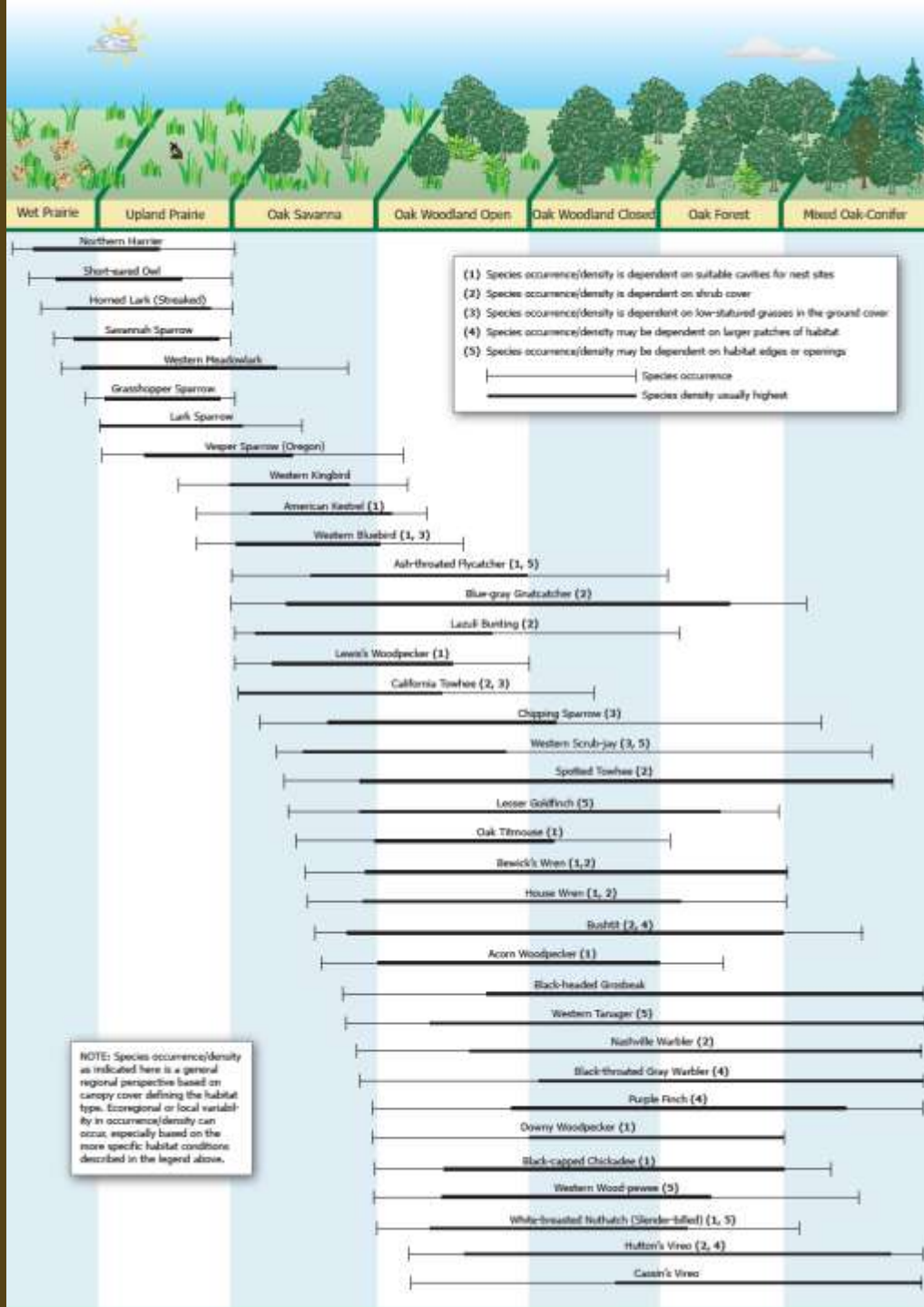
“The Long Tom Watershed is the anchor area for Willamette basin terrestrial species in upland prairie, oak savannah, and wet prairie habitats – it should be the geographic focus as we will not be able to recover listed species without it.”

- Steve Smith, USFWS, February 2005.

Connecting Upland Habitat across Rural Properties

- **Ecological Focus: wet prairie/upland prairie/savanna/woodland gradient**
 - species composition, habitat values, connectivity
- **Social Focus: landowner engagement gradient**
 - high-quality, intact and restored habitat to features: individual oaks, prairie patches, and pastures

Bird Diversity across Habitat Gradients



NOTE: Species occurrence/density as indicated here is a general regional perspective based on canopy cover defining the habitat type. Ecoregional or local variability in occurrence/density can occur, especially based on the more specific habitat conditions described in the legend above.

Habitat Value

- **>95 native vertebrate species** associated w/ Willamette Valley grasslands, although most do not depend on them exclusively (Veseley and Rosenberg 2010)
- **>714 native plant species** of which more than 391 are found principally or exclusively in grassland habitats (Ed Alverson, TNC, unpublished data).
- **>1100 species of arthropods in upland prairies** (Wilson et al. 1998), including 350-400 species of native bees in oak savannas, many specialized to one plant species or genus. Today 80% are likely extirpated or extremely rare (Andy Moldenke, OSU, unpublished data).
- **Six federally-listed plant and insect species** (USFWS 2010).
- **High cultural value** and significance –recreational, aesthetic, spiritual

Why Manage/Restore/Preserve?

- Biodiversity – wildlife, insects, plants
 - Pollinator services
 - Food, fiber, fuel
- Fire adapted
 - Wildfire protection, land value
- Economic opportunity
 - Grazing, NTFPs
- Cultural heritage
 - Aesthetics, family and community histories



Photo Credit: Ed Alverson

High Geographic Priorities

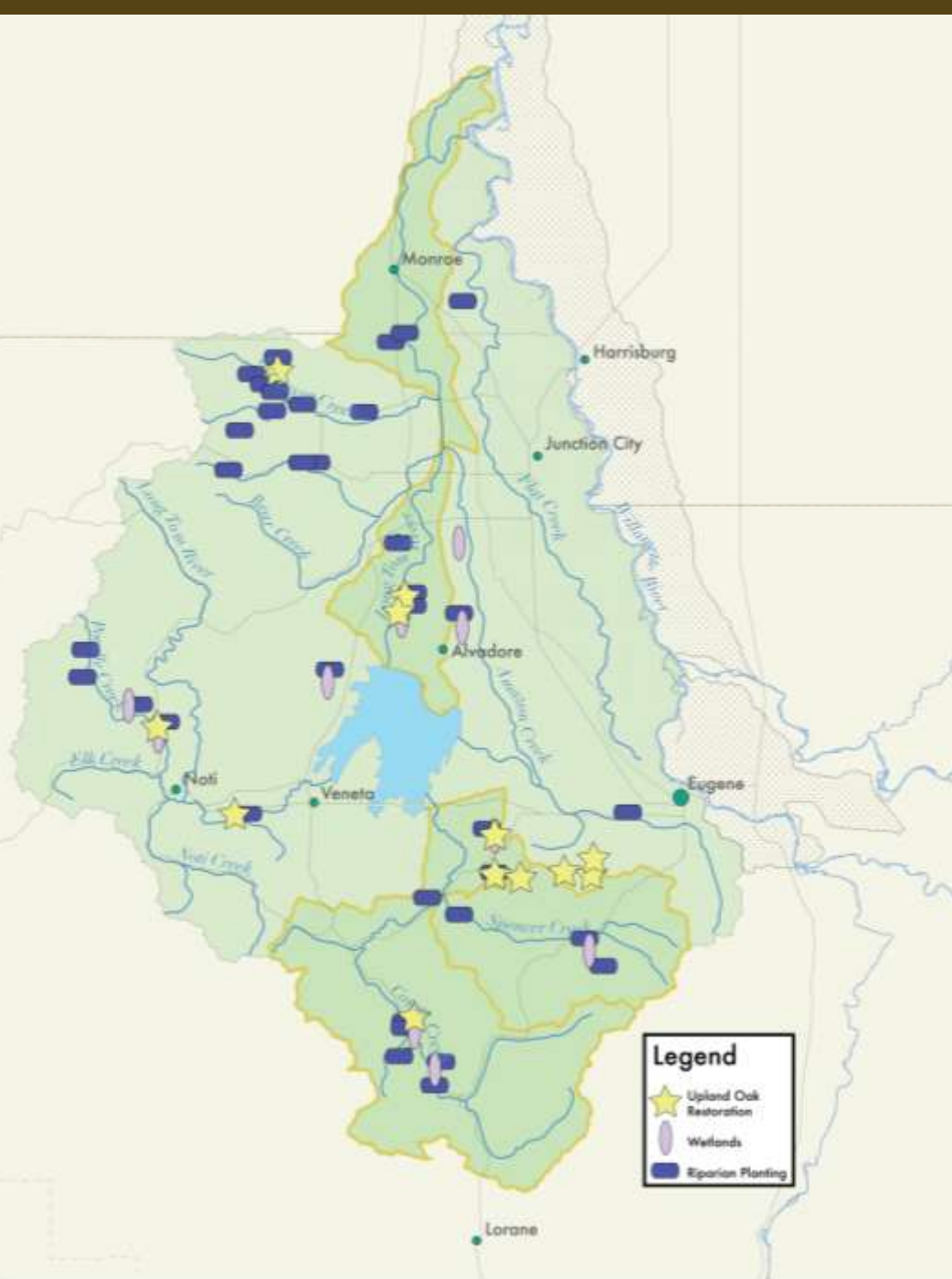
Best of What's Left in Condition and Extent:

- Spencer Creek
- Fern Ridge south
- Parts of Coyote Creek
- Lower end of Upper Long Tom
- Areas east of Fern Ridge Reservoir up to City of Eugene UGB

Necessary to Link with Populations to the North (species dispersal and genetic diversity)

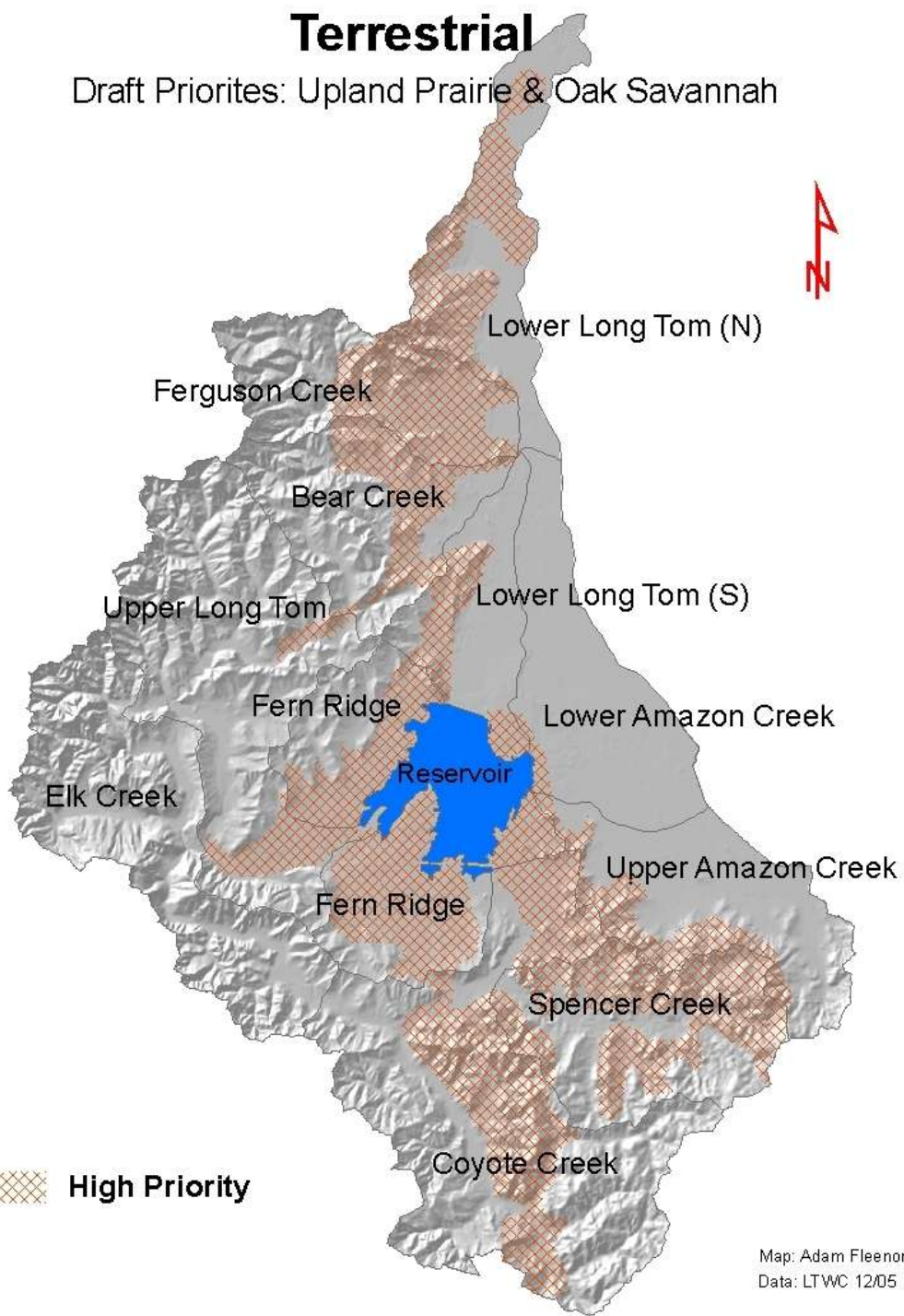
- Bear Creek
- Ferguson Creek
- Lower Long Tom

Upland Restoration Project Locations



Terrestrial

Draft Priorities: Upland Prairie & Oak Savannah



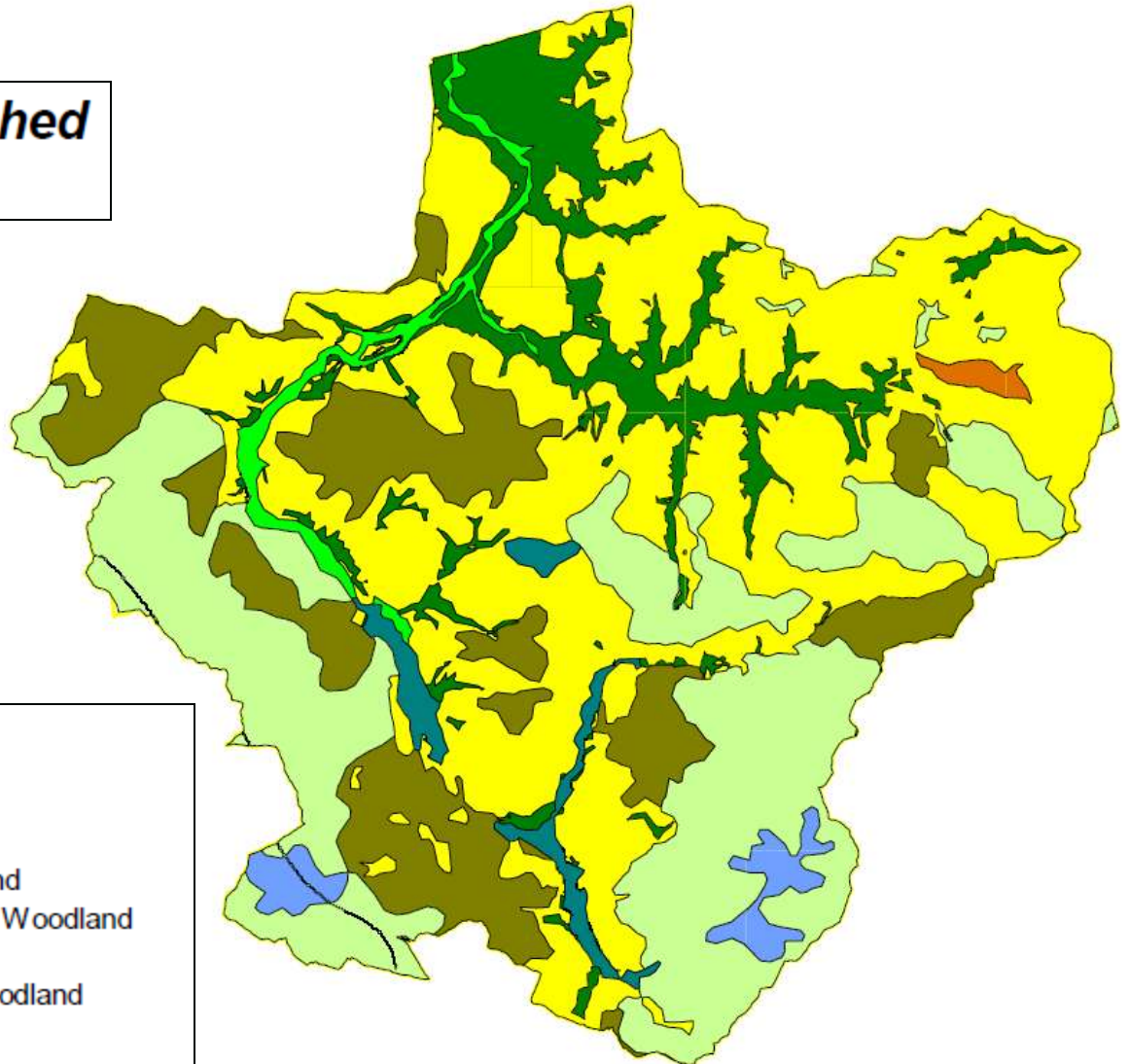
 High Priority

Map: Adam Fleenor
Data: LTWC 12/05

Coyote Creek Watershed Historic vegetation

Historic vegetation ca1850's
from TNC 2009

- Broadleaf Forest and Shrub Wetland
- Douglas-fir - Oak Forest and Woodland
- Dry Douglas-fir - Madrone Forest and Woodland
- Mesic Douglas-fir Forest
- Oak - Ponderosa Pine Forest and Woodland
- Riparian Forest and Shrubland
- Upland Prairie and Savanna
- Wet Prairie



Historic Acreage Overview

Slide by Ed Alverson

System	Acres	Percentage
Conifer Woodland/Forest	955,853	28%
Oak Woodland/Forest	468,090	14%
Savanna	607,563	18%
Upland Prairie	721,997	21%
Wet Prairie	330,285	10%
Subtotal	2,127,934	63%
Riparian	217,823	6%
Marsh/Swamp	41,635	1%
Water	51,205	2%
Brush	1,458	<1%
Subtotal	312,121	9%
Totals for WV Ecoregion	3,395,908	

Connectivity

What characteristics/qualities are essential for oak/prairie habitat to provide value and connections across the landscape?

- Size/Acres
- Gradient
- Grass and forb diversity
- Insects
- Other?



o Credit: Ed Alverson

At what scales can we engage landowners?

- Voluntary
- Incentive based
- Combination
- What other scales?
- How do we broaden our approach to work as a community support wildlife habitat?

Engaging Landowners

- Building and diversifying uplands restoration program
 - Outreach
 - Council meetings
 - Wildlife habitat management calendar
 - Projects
 - Stewardship
 - Connectivity

Upcoming LTWC Meeting (11/27/12)

- Anchor Oaks in the Long Tom Watershed:
Human Connections and Habitat Values
 - Social and Cultural Connections
 - Habitat Values
 - Management and Restoration Opportunities

Additional Topics to Engage Landowners

- Oak regeneration
- Rotational grazing
- Invasive plant management
- Oak and prairie associated species phenology and stewardship
- Landscape scale restoration of fire adapted ecosystems (Bart Johnson)
- Oak habitat and bird conservation
- Oak habitat and vineyards – incorporating oak habitat into vineyard planning and management



o Credit: Ed Alverson

Endangered and Endemic Vascular Plants of the Willamette Valley

Scientific Name	Family	Common Name	Global Rank	Federal Status	WV Endemic?
<i>Lomatium bradshawii</i>	Apiaceae	Bradshaw's lomatium	2	LE	Y
<i>Erigeron decumbens</i>	Asteraceae	Willamette Valley daisy	1	LE	Y
<i>Eucephalus vialis</i>	Asteraceae	Wayside aster	3	SOC	Y
<i>Pyrrocoma racemosa</i> var. <i>racemosa</i>	Asteraceae	Racemose goldenweed	1		Y
<i>Sericocarpus rigidus</i>	Asteraceae	White-topped aster	3	SOC	N
<i>Symphyotrichum hallii</i>	Asteraceae	Hall's aster	4		Y
<i>Cardamine penduliflora</i>	Brassicaceae	Willamette bittercress	4		Y
<i>Lathyrus holochlorus</i>	Fabaceae	Thin-leaved peavine	2	SOC	Y
<i>Lupinus oregonus</i>	Fabaceae	Kincaid's lupine	2	LT	Y
<i>Iris tenax</i> var. <i>gormanii</i>	Iridaceae	Gorman's iris	1		Y
<i>Sisyrinchium hitchcockii</i>	Iridaceae	Hitchcock's blue-eyed grass	2	SOC	Y
<i>Sidalcea campestris</i>	Malvaceae	Meadow checkermallow	4		Y
<i>Sidalcea cusickii</i>	Malvaceae	Cusick's checkermallow	4		Y
<i>Sidalcea nelsoniana</i>	Malvaceae	Nelson's checkermallow	2	LT	Y
<i>Castilleja levisecta</i>	Orobanchaceae	Golden paintbrush	1	LT	N
<i>Penstemon hesperius</i>	Plantaginaceae	Willamette beardtongue	1		Y
<i>Navarretia willamettensis</i>	Polemoniaceae	Willamette navarretia	1		Y
<i>Delphinium leucophaeum</i>	Ranunculaceae	White rock larkspur	2	SOC	Y
<i>Delphinium oregonum</i>	Ranunculaceae	Willamette Valley larkspur	4	SOC	Y
<i>Delphinium pavonaceum</i>	Ranunculaceae	Peacock larkspur	1	SOC	Y
<i>Horkelia congesta</i> ssp. <i>congesta</i>	Rosaceae	Shaggy horkelia	2	SOC	Y

“We passed in going thither, several fine prairies, both high and low....The prairies are at least one-third greater in extent than the forest: they were again seen carpeted with the most luxuriant growth of flowers, of the richest tints of red, yellow and blue, extending in places a distance of fifteen to twenty miles (Charles Wilkes quoted in Boag 1992, 25).”