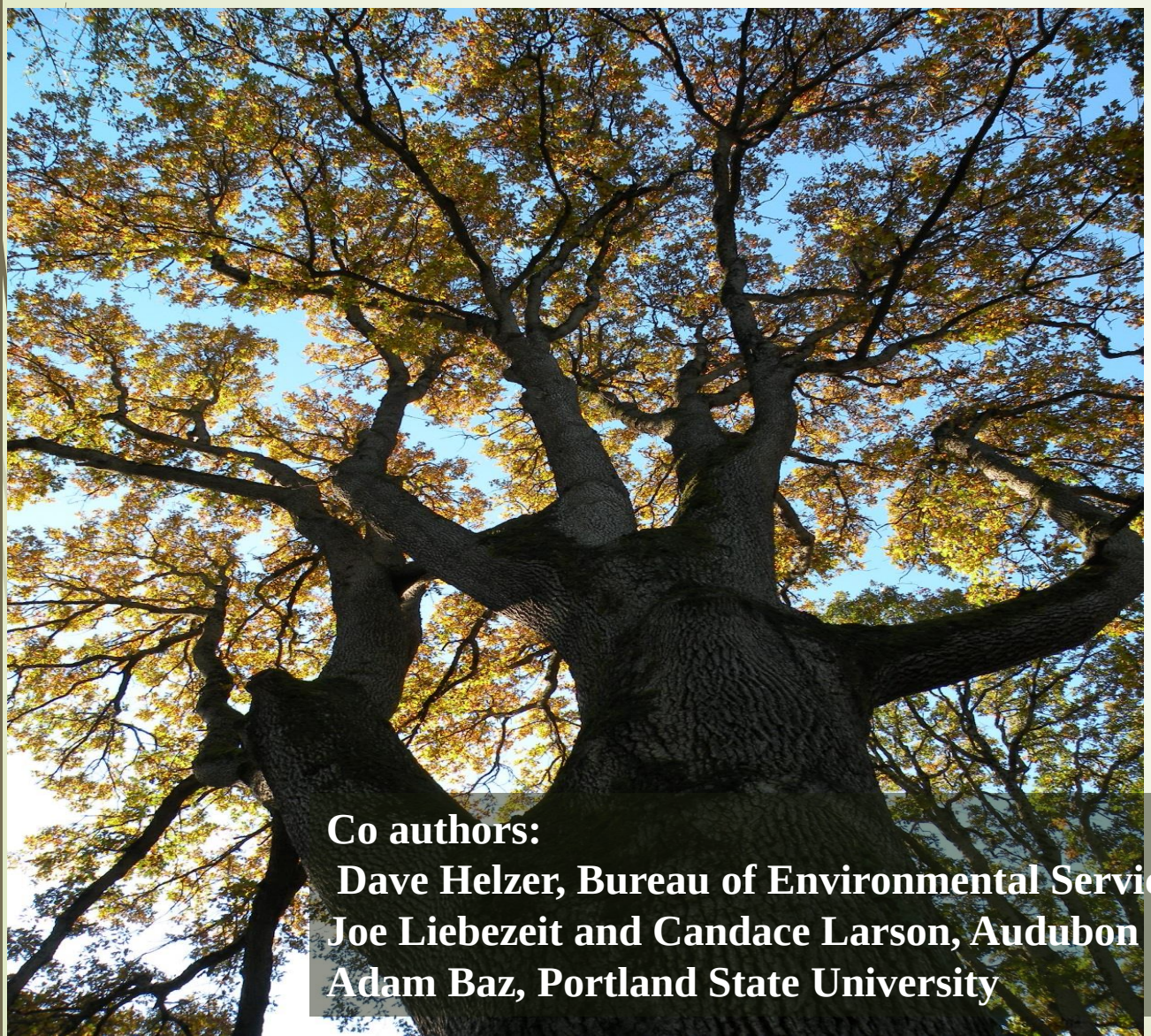
PORTLAND'S URBAN OAK HABITATS:



INVESTIGATING A REGIONAL NEXUS FOR OAK ASSOCIATED AVIAN SPECIES.

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working for clean rivers





Willamette Oaks Avian Study

ENVIRONMENTAL SERVICES
CITY OF PORTLAND

NICK FISH, COMMISSIONER
MICHAEL JORDAN, DIRECTOR

Mary Bushman

Bureau of Environmental Services

October 2015

Portland

The intersection of two ecoregions

Elk Rock Island

Oaks Park / Oaks Bottom

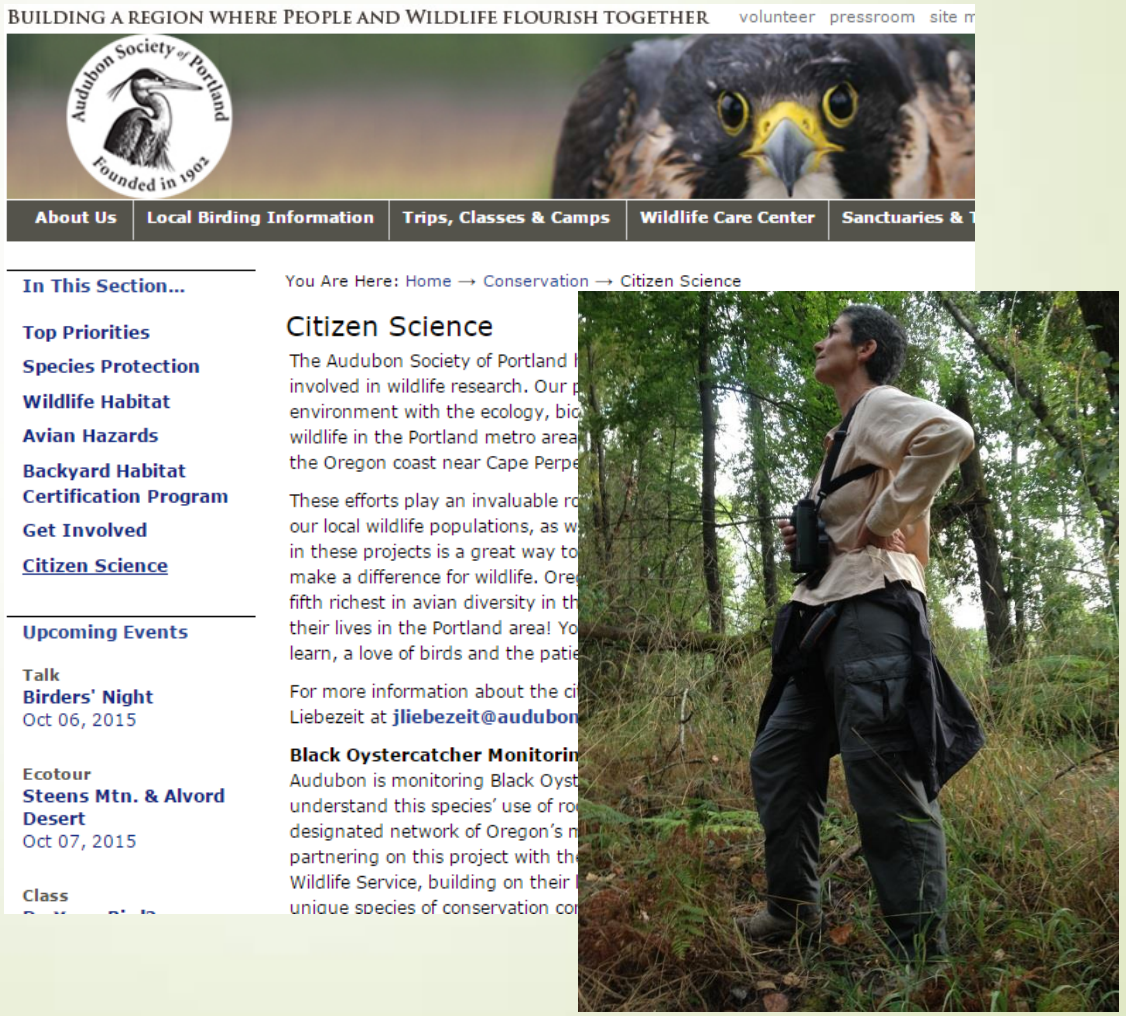
Kaiser Hill

Willamette River Escarpment

University of Portland

Baltimore Woods

Audubon Society of Portland and citizen contributions



Urban Study Design

Data analysis

Photo credit : https://commons.wikimedia.org/wiki/File:White-Breasted_Nuthatch_Lunch.jpg - Y. Roiter, Potsdam, NY, April 8, 2005

Detections

Highly associated species reach some of their highest densities in oak habitats, though they may also be abundant in other habitats.

Species are defined as **oak-obligates** if > 75% of their historic or current population resides in oak habitats.

https://commons.wikimedia.org/wiki/File:White-breasted_Nuthatch_(nesting)_-NMP_6-11-12_1.jpg

2014-15 WILLAMETTE OAK POINT COUNT DATA

SPECIES ABUNDANCE INDEX*

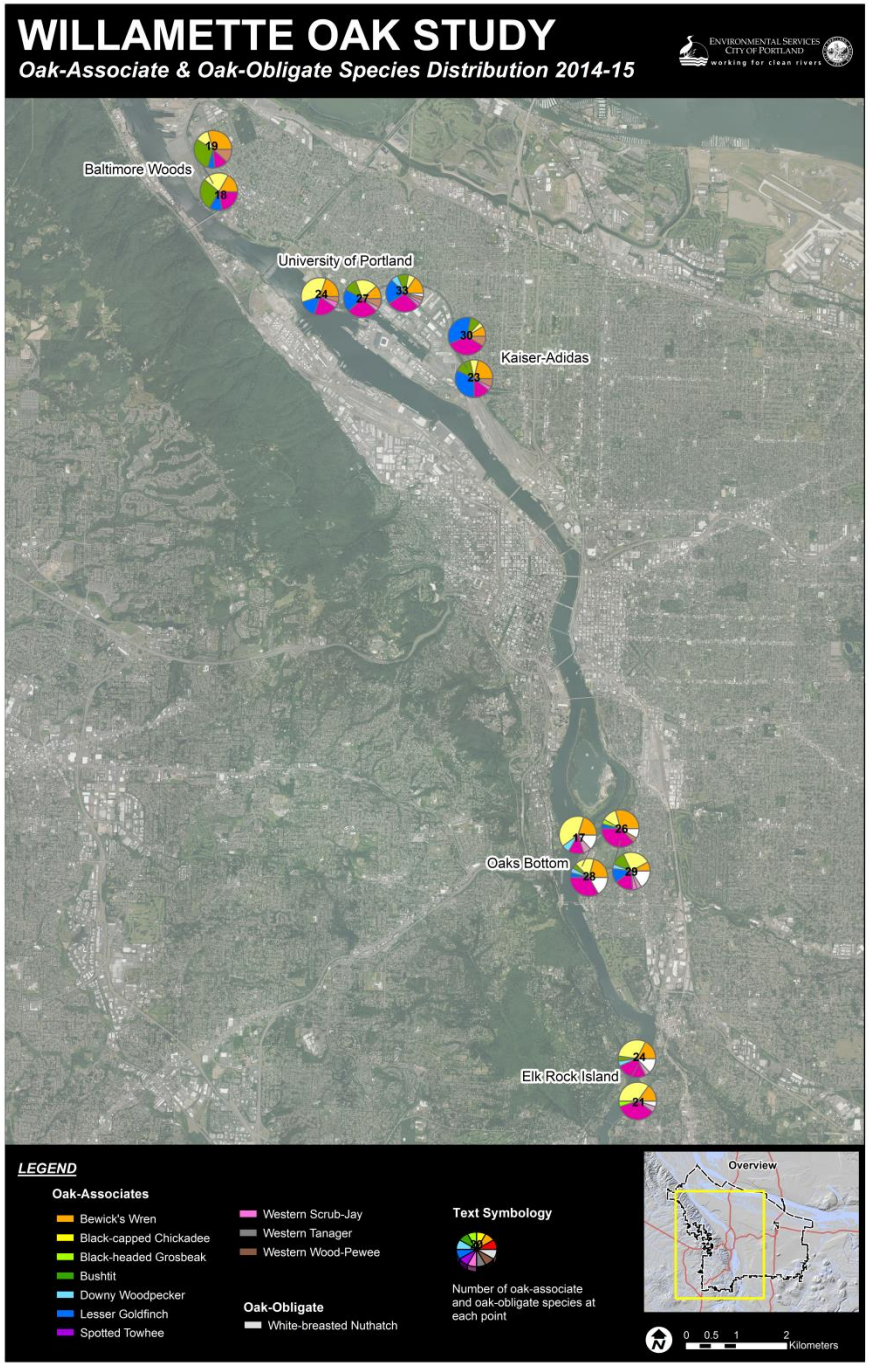
	Species Name	Total Detections	Abundance Index
1	Song Sparrow	119	1.55
2	American Robin	80	1.04
3	Spotted Towhee	74	0.96
4	American Crow	60	0.78
5	Black-capped Chickadee	56	0.73
6	Bewick's Wren	53	0.69
7	Lesser Goldfinch	41	0.53
8	Anna's Hummingbird	31	0.40
9	Bushtit	27	0.35
10	American Goldfinch	24	0.31
11	Brown Creeper	19	0.25
12	Dark-eyed Junco	17	0.22
13	House Finch	17	0.22
14	White-breasted Nuthatch	17	0.22
15	Western Wood-Pewee	11	0.14
16	Yellow-rumped Warbler	10	0.13
17	European Starling	9	0.12
18	Golden-crowned Kinglet	8	0.10
19	Vaux's Swift	8	0.10
20	Orange-crowned Warbler	7	0.09
21	Downy Woodpecker	6	0.08
22	Mallard	6	0.08
23	Western Tanager	6	0.08
24	Wilson's Warbler	6	0.08
25	Canada Goose	5	0.06
26	Northern Flicker	5	0.06
27	Brown-headed Cowbird	4	0.05
28	Golden-crowned Sparrow	4	0.05
29	Western Scrub-Jay	4	0.05
30	Cedar Waxwing	3	0.04
31	Cooper's Hawk	3	0.04
32	Common Yellowthroat	3	0.04
33	Pacific-slope Flycatcher	3	0.04
34	Stellar's Jay	3	0.04
35	Black-headed Grosbeak	2	0.03

*Includes detections within 50m and associated flyovers. Excludes >50m

*Abundance index = # species detections / total number surveys (77)

Distribution

https://commons.wikimedia.org/wiki/File:Bewicks_Wren.jpg



Breeding status

201-15 WILLAMETTE OAK POINT COUNT DATA

BREEDING STATUS*

Species Name	Detections			Data-deduced Breeding Status	Inferred Breeding Status	Oak Obligate (O) / Associate (A)	Nesting Date Range		
	April	May	June				April	May	June
Bewick's Wren	S C V	S C V	S C V	Breeding 2014 &2015	B	A			
Black-capped Chickadee	S C V	S C V	S C V	Breeding 2014 &2015	B	A			
Black-headed Grosbeak	-	S	S	Breeding 2014 &2015	B	A			
Bushtit	C	C V	C V	Breeding 2014 &2015	B	A			
Downy Woodpecker	C	S V	V	Breeding 2014 &2015	B	A			
Lesser Goldfinch	S C	C	S C	Breeding 2014 &2015	B	A			
Spotted Towhee	S C V	S C V	S C V	Breeding 2014 &2015	B	A			
Western Scrub-Jay	C	V	-	Breeding 2014	B	A			
Western Tanager	-	S C	-	No breeding		A			
Western Wood-Pewee	-	-	S	Breeding 2014	B	A			
White-breasted Nuthatch	S C V	S C	C	Breeding 2014 &2015	B	O			
						A=11, O=1			
				If species deduced as breeder by "Song" and/or "Presence," then breeder (**B**).	Breeding status in oak habitat determined using best professional judgement, and after consulting breeding dates in "Birds of Oregon.	As defined by Altman and Stephens in "Bird Habitat and Populations in Oak Ecosystems of the Pacific Northwest."	Black areas represent the range of dates observed nesting in the Pacific NW, including clutch initation through fledging. Data from "Birds of Oregon."		

***Includes detections withn 50m, flush detections, and associated flyovers, but excludes detections >50m and independent flyovers**

Questions?