NORTHWEST BIOLOGICAL CONSULTING
HABITAT RESTORATION - ENVIRONMENTAL PLANNING
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Phase Two Survey of cavity nest trees (snags) in the Talent area of the Greenway that remain after the Almeda Fire of 2020.

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Introduction:

This Greenway nest tree survey is a continuation of the **Phase One** survey that was completed in Phoenix in August of 2024, which encompassed 3 cavity nest tree areas in **(link to interactive map):** **https://www.google.com/maps/d/u/1/edit?mid=1yIOqGoxrUA1SwhHqpKZofDHpQFungms&usp=sharing**

As a continuation of that survey: This **Phase Two** survey area is focused on the burned riparian/wetland corridor of the Bear Creek Greenway in Talent, from the Suncrest Road Bridge in the North (RM18) to an area South of Lynne Newbry Park (RM 19). This volunteer survey was done to assist The Freshwater Trust (TFT) who is managing the Fuels Reduction Project that was initiated by the Oregon State Fire Marshall and funded on behalf of the awardees, Jackson County and the cities of Talent and Phoenix. The nest tree information was passed along in the field to TFT and the Bartlett Tree Service (Contractor) to assist the work by indicating what trees were marked for saving and their locations.

Methods:

The focus of the survey was to identify and mark cavity nest trees that will be saved from the fuel reduction removal project. The nest trees, indicated by cavities and bird utilization, were surveyed in the field, marked and numbered with green flagging, and GPS located by cell phone to obtain Latitude and Longitude of each numbered tree. All the burned snags along the Bear Creek Greenway were inventoried in the areas identified in **Figures one and two.** This was accomplished by field checking and viewing the trees and birds by using binoculars and noting the snags that contained cavities and evidence of bird presence, nest utilization and granary use for storage of acorns by Acorn Woodpeckers.

Cavity Nesting Birds Observed in the Two Survey Areas:

Acorn Woodpeckers *(Melanerpes formicivorus),* Northern Flickers (*Colaptes auratus*), Red- breasted Sapsuckers(*Sphyrapicus ruber)*, Downy Woodpeckers (*Dryobates pubescens),* Black-capped Chickadees (*Poecile atricapillus)*, Tree Swallows (*Tachycineta bicolor),* White-breasted Nuthatches (*Sitta carolinensis)*, Bewick's Wrens *(Thryomanes bewickii)*, and European Starlings *(Sturnus vulgaris*), were observed in many of the snags along the burned areas of Bear Creek (**See attached cavity nesting bird photographs in the Appendix).**

Project Participants

The survey of burned trees (snags), that contain potential nest cavities and bird utilization was completed for Save the Phoenix Wetland (STPW) Group by 11 volunteer birders: Scott English (Lead), and Shannon Rio, Leslie Hart, Janet Kelly, Braden Wilborn, Jeff Armitage, Mary Wells, Holly and Alan Hubbard, Frank Lospalluto, and Scott Blair. Mira Skibinski completed all of the GIS based maps.

Results:

The snags in general, were comprised of four types:

1. **Small trees**, less than 6-inch DBH (Diameter at Breast Height). These trees contained much of the fuels that were targeted in the fuel reduction effort and typically did not contain cavities for nesting birds due to the small DBH and height.
   These trees were cut down and chipped for mulch. They were not surveyed or mapped.
2. **Hazard trees**, 12 in and greater DBH that were considered hazard trees which could fall and cause injury to people or damage to property. Many of these trees were cut down and piled into log decks. They were not surveyed or mapped.
3. **Short broken top snags** that were 12 in DBH and larger were not considered by the regional fire departments as significant fuel. The snags did contain some cavities, but these snags were not targeted

for removal and were not specifically surveyed or marked. These snags were left standing.

4. **Large trees with cavities** were considered potential nest habitat and were surveyed and mapped. The cavities were holes created by woodpeckers or broken tree or branch top cavities created by natural conditions. These trees were surveyed after the nesting season; therefore, no data was available as to specific nesting activity. However, many of the cavities contained potential nests and a number of cavity nesting birds were observed near the nests. These trees were surveyed, mapped, and flagged in the field to be saved from logging. Photographs of the cavity nesting birds were taken and are included in the Appendix.

Refer to the following link for an interactive electronic map version of the survey results:
https://www.google.com/maps/d/u/1/edit?mid=12-5sC1FnIe1GTp8WKFKGpzA_9j6fEzg&usp=sharing

Figures

Refer to the following figures showing the locations of nest trees within the Phase Two survey areas of the Talent area of the Bear Creek Greenway:

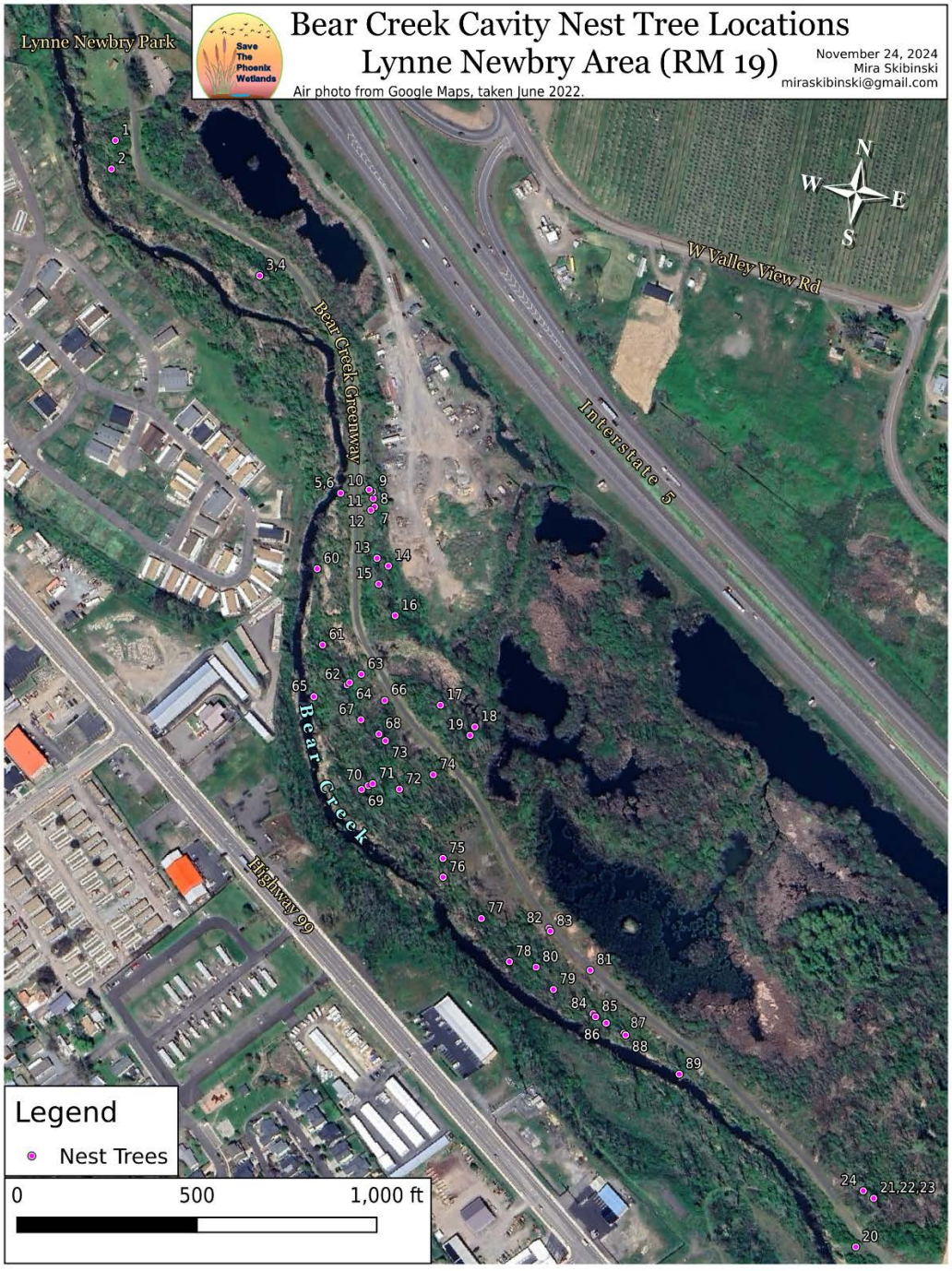

Figure 1. Lynne Newbury Park area contained an overall rough estimate of **258** total snags and of that number there were **54 large cavity nest trees** that were surveyed, mapped, & saved along the Bear Creek Greenway, in Talent. RM 19

Figure 2. Suncrest Road Area contained a rough estimate of **264** total snags**.** Of that number **81** large cavity nest trees were located and saved along The Bear Creek Greenway in Talent. **RM 18**

Photographs

Refer to the following photographs and descriptions of typical snags surveyed within the Phase Two survey areas of the Talent area of the Bear Creek Greenway:

Photo by Scott English

Photo 1. Illustrates a large hazard tree snag with dense canopy and no cavities, among a stand of smaller trees that contain abundant fuels and no cavities. These trees were not marked to save and were taken down.

Photo by Scott English

Photo 2. Illustrates a large tree in the foreground with cavities and birds present that were marked and saved. Many of the smaller trees in the background contained fuels in their canopy and were removed.

Photo by Scott English

Photo 3. illustrates a typical burned snag, that contained a cavity that was used for nesting by cavity nesting birds. These snags were typically larger than 12-inch DBH. There were numerous short broken top snags in the study areas but these snags were not subject to logging because they were not considered as significant fuels by the local fire departments and were not surveyed or marked. These snags were not logged.

Photo by Scott English

Photo 4. illustrates the typical large (Greater than 12 in. DBH) broken-top trees, with small canopies with potential nest cavities that were surveyed and marked for saving. These trees had at least one cavity either created by a cavity nesting bird or created by natural forces. The nesting season is over but cavity nesting birds were typically observed and noted in many of these trees. **135** cavity nest trees like these two were marked and saved in the Lynne Newbry and Suncrest Road study areas. The total number of snags estimated in these two areas was **264.**

Photo by Scott Blair

Photo 5. Illustrates an Acorn Woodpecker placing an acorn into a hole created to store food for the Woodpecker. This type of habitat tree is known as a granary tree for food storage during the winter months. Numerous granary trees were noted in the survey and these trees were all marked and saved.

Tables

Refer to the following tables one and two of the Lynne Newbry and Suncrest Road surveys which describe each of the numbered cavity nest trees with details on cavities, nests, granaries, and bird presence and utilization.

Table 1. Lynne Newbry Area, RM 19

Trees	Latitude	Longitude	Notes
1	42.24381	-122.77482	Broken top cavity snag, Starlings present
2	42.24359	-122.7748	Broken top cavity snag, no birds present
3,4	42.24302	-122.77309	Cavity, snags together, A. Woodpeckers
5,6	42.24152	-122.77183	Cavity,2 snags together, no birds present
7	42.24147	-122.77146	Cavity in snag, A. Woodpeckers present
8	42.24153	-122.77149	Broken top cavity, Starlings present
9	42.24158	-122.77151	Cavity in snag, A. Woodpeckers present
10	42.24158	-122.77154	Broken top Cavity, 2 A. Woodpeckers
11	42.24159	-122.77155	Cavity, no birds present
12	42.24144	-122.77149	Cavity, BC Chicadee present
13	42.24109	-122.77133	Cavity, A. Woodpeckers nearby
14	42.24105	-122.7712	Cavity, Starlings & A. Woodpeckers
15	42.2409	-122.77126	Cavity, Yellow Rumped Warbler
16	42.24069	-122.77103	B H Cowbird, Starlings in Cavity
17	42.24009	-122.77039	E. Starlings near cavity
18	42.23998	-122.77	Broken top cavity, GBH roosting in tree
19	42.23991	-122.77003	N. Flicker near cavity
20	42.23668	-122.7651	Elongated cavity, no birds present

Trees	Latitude	Longitude	Notes
21,22,23	42.23707	-122.76502	3 trees together, A. Woodpeckers at cavity
24	42.23711	-122.76514	Cavities in Twin Trunks, no birds present
60	42.24092	-122.77191	Broken top cavity, no birds present
61	42.24036	-122.7717	Cavity in snag, Starlings nearby
62	42.2401	-122.77137	Big Cavity, A. Woodpecker perched
63	42.2402	-122.77125	Cavity nest, A. Woodpeckers at Granary
64	42.24012	-122.77135	Cavities, and C. Waxwings & Starlings
65	42.23996	-122.77168	Cavity on top, A. Woodpeckers present
66	42.24004	-122.77096	Cavity, Downy Woodpecker present
67	42.23986	-122.77116	2 large cavities & 1 small, no Birds seen
68	42.23978	-122.77095	Broken top cavity, granary holes visible
69	42.23934	-122.77101	Cavity located, no birds present
70	42.23938	-122.77095	Cavity, Starlings present near cavity
71	42.2394	-122.77091	Cavity, with N. Flicker and Bewicks wren
72	42.2394	-122.77063	Cavity, A. Woodpeckers nearby
73	42.23974	-122.77087	Broken top cavity, Starlings present
74	42.23956	-122.77032	Cavity, no birds present
75	42.23895	-122.77005	Cavity, split trunk, no birds observed
76	42.23881	-122.77001	Cavity, no birds but flushed nearby Bear!
77	42.23856	-122.76954	Broken top cavities, & branch crotch hole
78	42.23828	-122.76917	Many cavities near top of tree, no birds
79	42.23814	-122.76867	A. Woodpecker working on cavity opening
80	42.23828	-122.76889	Cavities, A. Woodpecker present
81	42.23834	-122.76834	Cavity at top, A. Woodpeckers present
82	42.23859	-122.76884	Cavity, with Starlings nearby
83	42.23857	-122.76882	Cavity with no birds present
84	42.23802	-122.76822	Cavity with Granary holes present

Trees	Latitude	Longitude	Notes
85	42.238	-122.76819	Cavity, A. Woodpeckers nearby
86	42.23797	-122.76807	Bean shaped cavity, no birds present
87	42.23792	-122.76787	Cavity with Starlings present
88	42.23791	-122.76785	Cavity, no birds present
89	42.2377	-122.76723	natural cavity, split trunk, no birds nearby

Total of 54 Cavity Nest Trees were numbered and marked on the trees with green ribbon.

Table 2. **Suncrest Area, RM 18**

Trees	Latitude	Longitude	Notes
1,2,3	42.25289	-122.78612	3 trees together, cavities, no birds seen
4	42.25287	-122.78614	Cavity, no birds present
5	42.25283	-122.78616	Cavity, starlings present
6,7,8	42.2531	-122.78652	3 trees, many cavities, A. Woodpeckers
9	42.25319	-122.78722	Many cavities, A. Woodpeckers present
10	42.25331	-122.788	Cavity with A. Woodpecker at entrance
11	42.25299	-122.788	Cavity with granary & A. Woodpecker sited
12	42.25303	-122.788	Cavity, no birds present
13	42.25339	-122.78795	A. Woodpecker near cavity
14	42.25352	-122.7882	A. woodpecker perched nearby
15,16	42.25331	-122.78851	2 Trees, Cavity, A. Woodpecker present
17	42.25338	-122.78894	Cavities, A. Woodpecker present
18	42.25358	-122.78934	Multi trunk snag with cavities, no birds
19	42.25462	-122.78901	Broken top cavities, no birds present
20	42.25497	-122.78921	Broken top cavity, granary, A. Woodpecker
21	42.25516	-122.78914	Broken top w/cavities, no birds present
22	42.25532	-122.78921	Cavity, Granary tree, no birds present
23	42.25568	-122.78932	Multiple trunks with cavities, no birds
24	42.2555	-122.78964	Cavity, A. Woodpecker perched nearby
25	42.25588	-122.79026	Broken top cavity, no birds present
26,27,28	42.25596	-122.79006	3 tree clump, cavities, A. Woodpeckers
29,30,31	42.25595	-122.78999	Cavities in 3 tree clump, A. Woodpeckers
32	42.25595	-122.79008	Big cavity, A. Woodpeckers present
33	42.25607	-122.7907	Cavity appears new but no birds present
34	42.25634	-122.79023	Several broken top cavities, no birds sited
35,36	42.25655	-122.79024	2 trees together, cavity, no birds present

Trees	Latitude	Longitude	Notes
37	42.25663	-122.79067	A. Woodpecker in tree close to cavity
38	42.25865	-122.79054	No birds present near the cavity
39	42.25667	-122.79058	Starlings present in tree with cavity
40	42.25366	-122.78952	Cavity tree with starlings present nearby
41	42.25751	-122.79061	Broken top cavities, no birds present
42,43	42.25713	-122.79081	2 forked trees, cavity, no birds present
44	42.25728	-122.79053	Starlings in tree with cavity
45,46	42.257	-122.79068	Broken top cavities, no birds present
47	42.25699	-122.79061	Cavity, no birds sighted in vicinity
48	42.25682	-122.79069	Broken top cavities, no birds present
49	42.2568	-122.79067	Cavity, no birds present
50	42.25669	-122.79072	Cavity, no birds sighted
51	42.2567	-122.79059	Broken top cavities, no birds observed
52	42.2535	-122.78741	Cavity, no birds sighted
53	42.25359	-122.7877	Cavity, Starlings sighted nearby
54,55	42.25364	-122.78748	Two trees, cavity, Red-tail hawk perched
56	42.25358	-122.78734	No birds sighted at this cavity nest tree
57	42.25354	-122.78812	No birds present at this cavity nest tree
58	42.25377	-122.78835	No birds present at this cavity nest tree
59	42.25356	-122.78826	Cavity, Starlings perched nearby
60	42.25374	-122.78835	Large cavities, A. Woodpeckers perched c
61	42.25401	-122.78868	Cavity, no birds sighted here
62	42.25422	-122.78875	Huge tree, many cavities, A. Woodpecker
63	42.25403	-122.78912	Broken top cavity, Starlings present at tree
64	42.25401	-122.78895	Broken top cavity, Starlings nearby
65	42.25442	-122.78914	A. Woodpecker perched near cavity
66	42.25464	-122.78894	Multiple cavities, no birds present

Trees	Latitude	Longitude	Notes
67	42.2554	-122.78918	Cavity, granary tree, A. Woodpecker seen
68	42.25513	-122.78879	Granary tree, Starlings perched on tree
69	42.25584	-122.78868	Broken top cavity, no birds present
70	42.25601	-122.78886	Granary tree, A. Woodpecker on tree
71	42.2561	-122.78888	Granary tree, A. Woodpeckers on tree
72	42.25597	-122.7889	Large cavities, A. Woodpeckers present
73	42.25626	-122.78899	Cavity, no birds noted
74,75,76	42.25627	-122.78909	3 trees, granary, A. Woodpeckers present
77	42.25643	-122.78909	Cavity, N. Flicker & Oak titmouse spotted
78	42.25652	-122.78905	Tree is15 ft. west, cavity, A. Woodpecker
79	42.25741	-122.7896	Cavity, no birds noted here
80	42.25789	-122.7897	A. Woodpeckers spotted near cavity
81	42.25801	-122.78977	Cavity tree, 40ft toward cr.,A. Woodpecker.

Total of 81 cavity nest trees located and numbered on the trees flagged with green ribbon

Appendix: Photographs of Cavity Nesting Birds That Were Typically Found in the Snags Located in the Mapped Greenway Areas

Photo by Scott English

Photo 6. An example of a large broken top snag that has multiple cavities that are utilized by a family of Acorn Woodpeckers. This snag and others like it were marked for saving.

Photo by Scott English

Photo 7. Indicates multiple cavities in this snag that are frequently utilized by European Starlings for nests. In some cases multiple cavities are used by E. Starlings as well as Acorn Woodpeckers.

Photo by Scott Blair,

Photo 8. Image of an Acorn Woodpecker coming out of a nest cavity.

Photo by Scott Blair

Photo 9. Image of an Acorn Woodpecker creating a cavity in a snag.

Photo by Scott Blair

Photo 10. Photograph of a Northern Flicker feeding on insects on a burned snag.

Photo by Scott Blair

Photo 11. Photograph of a Downy Woodpecker feeding on Mullen seeds.

Photo by Scott Blair

Photo 12. White-breasted Nuthatch walking down the trunk of a tree looking for insects. A number of these cavity nesting birds were observed in both study areas.

Photo by Scott Blair

Photo 13. A Bewick's Wren is another cavity nesting bird observed in the two burned survey areas.

Photo by Scott Blair

Photo 14. Image of a Black-capped Chicadee. Another cavity nesting bird observed in both of the burned riparian habitat survey areas.

Photo by Scott English

Photo 15. Example of Tree swallow feeding young nestling in cavity nest located at the top of the snag. This photo was taken in June near the Blue Heron Park area near Phoenix during the nesting season. Tree swallows were observed in the proximity of cavities in the October/November Phase Two survey, but they were not nesting.