

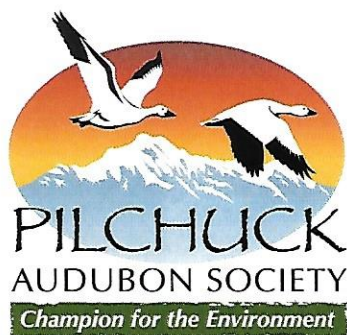


Bird Survey Report

Conducted at Lord Hill Regional Park June 25, 2017

Presented by Pilchuck Audubon Society

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Lord Hill Regional Park – Master Planning

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INTRODUCTION

This report is provided to document, using systematic and standard protocol, the bird species and wildlife habitat present in Lord Hill Regional Park (LHRP) in late June 2017. The goal is to provide relevant data to be used in informing the current LHRP Master Planning process underway by Snohomish County Parks and Recreation Department (Parks). While this report does not provide a complete census or annual cycle of data, it does offer evidence confirming the value of preserving this important ecosystem from further encroachment by extensive development or high impact uses.

On June, 25, 2017, in response to proposed use changes at LHRP, Pilchuck Audubon Society (PAS) conducted a single day bird census consisting of 43 survey points gridded throughout this 1300(+)-acre park to identify the diversity and general abundance of species using the park for breeding, foraging and refuge in June 2017. The results of the survey have been compiled and analyzed with results and recommendations provided in this report.

This survey effort was completed by volunteers comprising over 200 volunteer hours (207 hours). The survey documented a high number of individual birds and a wide range of species diversity across the park. Sixty-one species were detected; eleven of which were confirmed breeding in LHRP by surveyors during the point-count or scoping prior to the survey. The range of species across avian families included waterfowl, raptors, shorebirds, hummingbirds, woodpeckers, owls, and a wide variety of passerines or perching birds.

HISTORY AND PHYSICAL SETTING OF LORD HILL REGIONAL PARK

Lord Hill Regional Park covers approximately 1300 acres of lowland forest and wildlife area in the Snoqualmie Valley between the towns of Snohomish and Monroe, and the Cathcart area, Washington. The low elevation ridge that is the dominant feature of the park runs generally parallel to the Snohomish River. Characterized by basalt outcroppings, the highest peak in the park is Bald Mountain reaching 800 feet. (Figure 1)

Mitchell Lord was an early homesteader initially purchasing 80 acres on the hill in 1878 and expanding to 130 acres in 1884 to support farming operations. Lord was a dairyman, who in addition to his dairy cattle raised horses, sheep and hogs on the land.

The area, rich with large mature Douglas fir and Western Hemlock, attracted the timber industry and the area was logged of old-growth timber in the 1930s. The Department of Natural Resources harvested second growth



Figure 1: Lord Hill Regional Park location map (peakbagger.com)

timber from the area in the 1980s. Today the forest is a mixed lowland forest consisting of successional growth *Douglas fir*, *Western hemlock*, and *Western red cedar*. Other prominent trees include red alder and big leaf maple. In addition to the forest there are nine ponds and associated wetlands in the park.

The park is currently under the management of Snohomish County Parks and Recreation Department and provides day-use under a Park Master Plan developed in 1988. Key objectives of that plan included:

1. Preserve the natural, undeveloped character of Lord Hill and protect wildlife and their associated habitats. Discourage development in the interior of the site; develop areas such as the park headquarters near the property line at the park entrance.
2. Create a series of circulation routes throughout the park to provide opportunities for hiking, horseback riding and other non-motorized trail uses. Provide for handicapped accessibility.
3. Provide observation opportunities at the wetlands and ponds but restrict the number of access points. Protect the wetlands edges by constructing viewing platforms. Discourage off-trail use and prohibit horses in the wetlands areas.
4. Create educational experiences for all ages.
5. Develop park to be a year-round recreational facility, open only during daylight hours.
6. Provide for an on-site ranger residence near the park entrance.

These original objectives were amended in 1996 with a Supplemental Master Plan with the following additional goals:

7. Provide a directional trail signage system for park users.
8. Allow mountain bikes on trails on a trial-basis. Evaluate conflicts between user groups and any degradation to sensitive areas/natural resources attributed to mountain bike use to determine if the park should remain open for mountain bike use.
9. Evaluate degradation to sensitive areas and/or trails and adjacent land due to over-use or misuse. Determine if a trail should be temporarily closed for restoration or if a trail should be realigned to preclude further degradation.

While several resources mention the area is "rich with bird life", it doesn't appear there has ever been a bird survey of the park or any on-going monitoring to document bird life, population trends and/or habitat use by birds in LHRP.

BIRD SURVEY OF LORD HILL REGIONAL PARK

On June 25, 2017, volunteers from Pilchuck and Seattle Audubon Society organizations conducted a systematic search for bird species at Lord Hill Regional Park. Results from that effort are included in this report and include a list of bird species seen and/or heard, the general habitats in which they were found, and an assessment of breeding status on the property for each.

While a single survey effort provides valuable information on general diversity of species and can suggest general abundance information it is important to remember that this is a single snapshot in time. Migratory birds move between summer and wintering grounds and resident birds often utilize habitat differently between seasons so to document the full picture of bird life at Lord Hill Regional Park additional monitoring and data collection is needed.

PROTOCOL

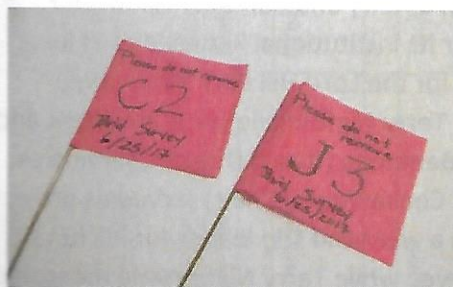
Surveys were conducted using a standard point count method with a time window of 20 minutes per survey site. Additional data was collected on habitat features and evidence of avian activity such as breeding bird displays, visible nests, woodpecker holes and owl whitewash. A copy of the data sheet used for this effort is included in Appendix A.

Survey sites were selected by laying a grid over the Lord Hill Regional Park Base Map (Base Map) developed in part from the recent trails inventory conducted by Parks. Survey points, although randomly selected were moved to site along trails shown to exist on the Base Map so that surveyors were staying on existing paths. Survey points were alpha-numerically numbered starting near the north parking lot with A1 and generally working downward and across the park with sites numbering A(1-5), B(1-5), C(1-5), D(1-5), E(1-5), F(1-5), G(1-5), H(1-5), I(1-5) and J(1-5). A map showing survey sites is shown in Figure 2: Survey Sites, on the following page. The final total of survey sites throughout the park totaled 43 locations across the variety of ecosystems within the park and included wetland areas, open/edge areas, and woodland sites.

Prior to the survey, each site was ground-truthed, and with the permission of Parks, temporarily identified with brightly colored flagging. GPS coordinates for each survey site were documented to aid in finding the exact location and to assist, if needed, in future surveys. During the ground truthing, 7 sites were identified as too challenging to access due to overgrown vegetation, missing or unclear trails. These sites include C3, C4, F4, F5, I5, J1 and J2. All flagging was removed at the end of the survey.

Volunteer recruitment efforts included outreach to Pilchuck Audubon Society membership, Seattle Audubon, Eastside Audubon, and Puget Sound Bird Observatory with emphasis on strong birding skills and the ability to identify birds by ear.

Prior to surveying volunteers were provided with an orientation which included wayfinding, safety, and proper data collection and documentation. Eight teams were assembled to include at least one expert birder per team. Each team was assigned a route that included between 5 and 7 survey points. Packets were provided to each team that contained data sheets, maps, and GPS coordinates for the survey sites. Safety was a primary concern and so limited first aid packets and contact information for a base contact were also distributed.



Location flags for Bird Survey



Orientation prior to the bird survey was provided at the Snohomish County Boat Launch Park and surveyors carpooled to Lord Hill Regional Park to minimize congestion at the north and south parking lots.



Routes were started by approximately 8am and were to be completed by noon. Note that 4 sites (C1, C2, I4 and I5) were not accessed before the cut-off time and were surveyed the following Friday, June 30, 2017). Observers were asked to count birds and collect habitat information for 20 minutes at each site. Species detected while traversing between sites were noted in the comment section and are listed in the results as being detected at Non-Protocol Sites (NP). All methods of coaxing birds, such as playing calls/songs or “pishing” were prohibited.

Notes were also requested concerning interactions with other park users and noise that could impact the ability to detect birds. Copies of data sheets for all survey points are included in Appendix B.

BIRD SURVEY RESULTS

CONDITIONS and QUALIFICATIONS:

Typically surveys to document breeding bird information for lowland Western Washington are conducted between April and early June, so on the date of this survey, June 25, 2017 much of the breeding activity was complete. Species noted as “confirmed breeders” within this report were identified by visually seeing fledglings, parents carrying food, or active nests. Species noted as “probably breeders” were identified by singing males within the proper habitat or non-active but identifiable nest sites. Since the date fell outside the typical migratory window all birds detected were considered year-around residents or breeding ground residents of the park as opposed to incidental use by birds during migration for foraging or refuge.

Conditions on the day of the survey were generally appropriate for conducting a point-count style survey with clear skies (wind = 0 based on the standard Beaufort Wind Scale and sky conditions were clear based on USGS Breeding Bird Survey Sky Condition Codes). Starting temperature was 68° F but rose to above 80° F by noon which may have impacted bird activity and detection for survey points reached later in the day since birds tend to limit activity during higher temperatures.

Pilchuck Audubon Society represents approximately 1,400 members in the north Puget Sound region of Washington State. Our mission is to conserve and restore natural ecosystems focusing on birds and other wildlife for the benefit of the earth’s biological diversity across Snohomish County and Camano Island. Our members include expert birders and the organization is well respected for its institutional knowledge of local bird species, life histories and habitat requirements. Volunteer surveyors for the Lord Hill Park bird survey included Pilchuck Audubon Board Members, Cindy Easterson (President), Terry Nightingale (Vice President and weekend trip leader), Kathy Piland (Secretary), Judy Hall (Treasurer), Jim Beneteau (Board Director serving as Membership and Education Chair). Allen Gibbs (Board Director serving as Conservation Chair) served as project support and base person for the effort. Jonathan Blubaugh who serves as a weekend trip leader for Pilchuck Audubon helped guide 2 of our 4 youth participants in conducting the survey while Terry Nightingale mentored the other two youth volunteers. Joining us for this bird survey effort were graduates of Seattle Audubon’s Master Birder Program, Janice Bragg, Stuart Johnston, and Jean Trent. Additional expertise was provided by Mike Kozak, Liz Brown, Doug Resnick, Lisa Weber, Kelli Marx, Heather Durham, Reg Reisenbichler, Joyce Hershberger, and Jesse Mohrland.

BIRDS

Sixty-one bird species were found during the bird survey and are listed in Table 1. Birds at Lord Hill Regional Park benefit from a mixture of habitats which include pond and wetland areas, mature mixed forests, open meadows and edge habitat. Passerines in particular were found in robust numbers, particularly chick-a-dee

species, thrushes, flycatchers, woodpeckers, and wrens. Due to the park's size, large species requiring greater territory such as owls and raptures were also present. Of the sixty-one species detected, eleven were confirmed breeding within the park and thirty-three species were determined probable breeders in the park. Four state listed species were detected and two federal species. Pileated woodpecker is a state candidate of concern¹. Green Heron, Turkey Vulture and Osprey are state monitored species². Bald Eagle and Peregrine Falcon are listed as Federal species of concern.



These images were not taken during the LHRP survey but do represent a montage of the species detected within the park. Images include: Pileated Woodpecker, Pacific Slope Flycatcher, Chestnut-backed Chickadee, Swainson's Thrush, Western Tanager, Cedar Waxwing, Pacific Wren, Spotted Towhee.

¹ **State Candidate Species** is defined in WDFW Policy M-6001 to include fish and wildlife species that the Department will review for possible listing as State Endangered, Threatened, or Sensitive. A species will be considered for designation as a State Candidate if sufficient evidence suggests that its status may meet the listing criteria defined for State Endangered, Threatened, or Sensitive.

² **State Monitor Species** are those that require management, survey, or data emphasis for one or more of the following reasons:

- a. They were classified as endangered, threatened, or sensitive within the previous five years.
- b. They require habitat that is of limited availability during some portion of their life cycle.
- c. They are indicators of environmental quality.
- d. There are unresolved taxonomic questions that may affect their candidacy for listing as endangered, threatened, or sensitive species.

HABITAT

Birds at Lord Hill Regional Park benefit from a mixture of habitats and the presence of additional suitable habitat at the nearby Paradise Valley Conservation Area and Heirman Wildlife Preserve. In particular, species associated with wetlands and mixed lowland forests were found in robust numbers.

While Pilchuck Audubon's expertise lies primarily with birds, many of our surveyors are familiar with area native plants and the value they bring to bird friendly habitats. Native plants provide more choices with respect to food and shelter for resident and breeding birds as well as other wildlife. Abundant numbers of birds, as recorded within Lord Hill Regional Park suggests that birds are surviving by using the seeds/tissue of native plants and the insects that have co-evolved with them.

The park is rich throughout with snags, a tree remnant that provides important habitat for birds and other wildlife. Snags occur as a result of "disease, lightning, fire, animal damage, too much shade, drought, root competition and old age. Birds, small mammals, and other wildlife use snags for nests, nurseries, storage areas, foraging, roosting, and perching. Live trees with snag-like features, such as hollow trunks, excavated cavities, and dead branches can provide similar wildlife value. Snags occurring along streams and shorelines eventually may fall into the water, adding important woody debris to aquatic habitat. Dead branches are often used as perches; snags that lack limbs are often more decayed and, may have more and larger cavities for shelter and nesting. Snags enhance local natural areas by attracting wildlife species that may not otherwise be found there" (Washington Department of Fish and Wildlife, *Snags – The Wildlife Tree*).

As part of the survey effort, observations of native plants, approximate amount of tree canopy, dominant tree type and tree snags were documented. A list of identified native plants is provided below and observations of canopy cover, and snags within the survey circles are also provided. Surveyors documented 218 snags within the survey circles and estimated that 58% of those snags were actively being used by Pileated woodpecker, Red-breasted sapsucker, Downy Woodpecker, Hairy Woodpecker or Northern Flicker.

Survey Point	Latitude/Longitude		Tree Canopy Cover Estimate	Dominant Cover: Evergreen/Deciduous	#of Visible Snags	Woodpecker Activity
A 1	N47 51.733	W122 03.381	~60%	50/50	2	
A 2	N47 51.674	W122 03.086	>85%	Deciduous	4	
A 3	N47 51.688	W122 02.798	~60%	Evergreen	2	✓
A 4	N47 51.567	W122 02.831	~40%	Deciduous	5	✓
A 5	N47 51.408	W122 02.693	>85%	Evergreen	4	
B 1	N47 51.521	W122 03.323	~40	Deciduous	1	✓
B 2	N47 51.367	W122 03.551	>85%	50/50	10	✓
B 3	N47 51.224	W122 03.560	>85%	50/50	3	
B 4	N47 51.272	W122 03.801	>85%	Deciduous	1	
B 5	N47 51.278	W122 02.698	>85%	50/50	1	
C 1	N47 51.318	W122 03.933	>85%	Evergreen	6	✓
C 2	N47 51.132	W122 03.295	>85%	Deciduous	3	✓
C 3	DROPPED					
C 4	DROPPED					
C 5	N47 50.795	W122 03.459	~60%	Deciduous	1	
D 1	N47 51.492	W122 02.980	>85%	Evergreen	6	✓
D 2	N47 51.425	W122 03.007	~60%	Evergreen	12	✓
D 3	N47 51.130	W122 02.888	>85%	Evergreen	0	
D 4	N47 51.013	W122 02.898	>85%	Evergreen	0	
D 5	N47 50.934	W122 02.686	~40%	Evergreen	1	
E 1	N47 50.808	W122 02.527	<25%	Evergreen	20	
E 2	N47 51.055	W122 02.455	>85%	Evergreen	4	
E 3	N47 51.173	W122 02.479	>85%	Evergreen	8	✓

E 4	N47 51.311	W122 02.191	~60%	50/50	12	✓
E 5	N47 50.921	W122 02.227	>85%	Evergreen	2	✓
F 1	N47 49.920	W122 02.697	~60	Deciduous	1	✓
F 2	N47 49.973	W122 02.698	~60	Deciduous	2	✓
F 3	N47 50.185	W122 03.116	<25%	50/50	6	✓
F 4	DROPPED					
F 5	DROPPED					
G 1	N47 50.250	W122 02.890	<25%	50/50	6	✓
G 2	N47 50.417	W122 03.152	~40%	50/50	12	
G 3	N47 50.424	W122 03.081	~60%	50/50	4	✓
G 4	N47 50.569	W122 03.261	~60%	Deciduous	0	
G 5	N47 50.707	W122 93.425	>85%	Deciduous	0	
H 1	N47 50.310	W122 02.710	>85%	Deciduous	4	✓
H 2	N47 50.392	W122 02.861	~40%	Deciduous	5	
H 3	N47 50.655	W122 02.887	~75%	Deciduous	12	✓
H 4	N47 50.687	W122 03.160	~50%	Deciduous	2	
H 5	Not flagged – no coordinates		>85%	Evergreen	3	
I 1	N47 50.823	W122 02.995	>85%	Deciduous	3	✓
I 2	N47 50.798	W122 02.677	~40%	Evergreen	30+	✓
I 3	N47 50.664	W122 02.632	>85%	50/50	4	✓
I 4	N47 50.654	W122 02.540	~60%	50/50	3	✓
I 5	DROPPED					
J 1	DROPPED					
J 2	DROPPED					
J 3	N47 50.692	W122 02.408	~60%	50/50	7	✓
J 4	N47 50.405	W122 02.266	~60%	Deciduous	4	✓
J 5	N47 50.412	W122 02.499	>85%	50/50	2	✓

Trees and plants noted at survey locations:

Trees	Big Leaf Maple	<i>Acer macrophyllum</i>	
	Western Redcedar	<i>Thuja plicata</i>	
	Douglas Fir	<i>Pseudotsuga menziesii</i>	
	Red Alder	<i>Alnus rubra</i>	
	Beaked Hazelnut	<i>Corylus cornuta</i>	
	Shrubs	Vine Maple	<i>Acer cirinatum</i>
		Red Huckleberry	<i>Vaccinium parvifolium</i>
		Red Elderberry	<i>Sambucus racemosa</i>
		Salmonberry	<i>Rubus spectabilis</i>
		Thimbleberry	<i>Rubus parviflorus</i>
Himalayan Blackberry		<i>Rubus discolor</i>	
Trailing Blackberry		<i>Rubus ursinus</i>	
Hardhack		<i>Spiraea douglasii</i>	
Devil's Club		<i>Oplopanax horridus</i>	
Willows (unidentified species)		<i>various</i>	
Groundcover/Wetland Plants	Service Berry/Saskatoon	<i>Amelanchier alnifolia</i>	
	Red-osier Dogwood	<i>Cornus Stolonifera</i>	
	Goat's Beard	<i>Arunccus dioicus</i>	
	Red-flowering Current	<i>Ribes sanguineum</i>	
	Dull Oregon Grape	<i>Mahonia nervosa</i>	
	False Solomon's Seal	<i>Smilacina racemosa</i>	
	Star-flowered False Soloman's Seal	<i>Smilacina stellata</i>	
	False Lily-of-the-Valley	<i>Maianthemum dilatatum</i>	
	Fringecup	<i>Tellima grandiflora</i>	

	Piggy-back Plant	<i>Tolmiea menziesii</i>
	Foamflower	<i>Tiarella trifoliata</i>
	Creeping Buttercup	<i>Ranunculus repens</i>
	Large-leaved Avens	<i>Geum Macrophyllum</i>
	Stinging Nettle	<i>Urtica dioica</i>
	Pacific Bleeding Heart	<i>Dicentra formosa</i>
	Redwood Sorrel	<i>Oxalis oregana</i>
	Herb Robert	<i>Geranium robertianum</i>
	Small Bedstraw	<i>Galium Trifidum</i>
	Skunk Cabbage	<i>Lysichiton americanum</i>
	Water Plantain	<i>Alisma plantago-aquatica</i>
	Cattail	<i>Typha latifolia</i>
	Yellow Pond-Lily	<i>Nuphar polysepalum</i>
	Bracken Fern	<i>Pteridium aquilinum</i>
	Sword Fern	<i>Polystichum munitum</i>
	Maidenhair Fern	<i>Adiantum pedatum</i>
	Queen Anne's Lace/Wild Carrot	<i>Daucus carota</i>
	Salal	<i>Gaultheria shallon</i>
	Common Horsetail	<i>Equisetum arvense</i>
	Nightshade (European Bittersweet)	<i>Solanum dulcamara</i>
	Foxglove	<i>Digitalis purpurea</i>

CONCLUSIONS AND RECOMMENDATIONS

The number of birds and the species diversity found in Lord Hill Regional Park reveals much about the current habitat and health of this area for birds. This one day bird survey effort offers a snapshot in time and a page in the story of how the park functions as important habitat for wildlife. The major take-away from this systematic collection of data is that robust numbers of birds and a high diversity of species exist in the park and their presence provides a compelling case for preserving this area as important habitat for wildlife and low-impact recreation.

As shown in the sidebar on this page a comparison of the number of species documented for Lord Hill Regional Park are quite high in comparison to other Snohomish County parks during the month of June. Parks that include similar habitat but include higher impact use such as developed mountain bike trails in Paradise Valley Park or sports recreation and dog parks as in Willis Tucker Community Park are documented as having fewer species.

Among the birds documented by the survey at LHRP are species that depend on a specific habitat. For example, Pied-billed Grebe, Hooded Merganser, Mallard, and Green Heron all rely on healthy ponds and associated wetlands. All four of the swallow species found in the park, Violet-green swallow, Tree swallow, Cliff swallow and Barn swallow, rely on the insects that hatch from these wet or moist areas. In a similar fashion, the Flycatcher species rely on the insects associated with large, healthy, native plant as found in very

Lord Hill Regional Park exhibited higher numbers of bird species than most parks across Snohomish County as reported on eBird and filtered for sighting reports for the month of June.

SNOHOMISH COUNTY PARK	SPECIES DOCUMENTED
Spencer Island	109
North Creek Park	69
Whitehorse Comm Park	65
Heirman Wildlife Park	62
Lord Hill Regional Park	60
Narbeck Wetland Sanct	60
Portage Creek Park	48
Paradise Valley CA	45
McCollum Pioneer Park	35
Martha Lake Park	34
Martha Lake Airport Park	31
Meadowdale Park	28
Picnic Point Park	28
Kayak Point Park/Camp	25
Twin Rivers Park	22
Gissberg Twin Lakes	14
Southwest County Park	13
Willis Tucker Comm. Park	8

large green spaces such as LHRP as it now exists. There is a rich abundance and variety of Woodpecker species in the park due to the high number and quality of snags to provide nesting and foraging features. Vireos and Thrushes, including the most abundant species in the park, Swainson's Thrush, rely on the dense, mixed tree canopy available from the successional growth of both evergreen and deciduous trees throughout the park.

The Snohomish River, adjacent to the park allows for the proper habitat for Spotted Sandpiper, Bald Eagle and Osprey. The sheer size of the park is what allows for a species such as the Great Horned Owl to reside and possibly breed in the park.

Ultimately the question comes down to, why should we care that these birds are found in the park? Why do birds matter? Birds matter because like the proverbial canary in the coal mine, birds alert us to the health of places in which we live, work and play. The sheer ubiquity of birds makes their presence unavoidable, but the number and diversity of species gathered in a space relays to us the health of the area. When we save birds from threats due to encroachment, development and the taking of resources, we are also saving ourselves...all life benefits by virtue of being better stewards of our lands and waterways.

Lord Hill Regional Park has revealed a unique and diverse collection of birds and it is this distinctive collection of species that give the park a sense of place. If the landscape is altered for high impact use, this collection of species will change forever and the qualities of the park that give rise to beauty and solitude will be lost. Birdsong is something that accompanies a stroll through the park or a meandering ride on horseback and is as much a fabric of the park as the tall trees and fragrant understory. To fully embrace the value of the park is to take in the full spectrum of nature's sights and sounds. The upward trill of the Swainson's Thrush in June is as key to the experience of enjoying this space as the views.

Pilchuck Audubon Society recommends that Snohomish County Parks revisit the founding goals and principals for this facility, to "preserve the natural, undeveloped character of Lord Hill and protect wildlife and their associated habitats." We applaud some of the early efforts to place value on critical areas and to "protect the wetlands" from degradation by park users.

We recommend fulfilling the goals from the 1996 Supplemental Master Plan which calls for the installation of "directional trail signage" to help guide and educate park users.

We would also encourage a more formal evaluation of the conflicts between user groups and any degradation to sensitive areas/natural resources attributed to mountain bike use. We understand that Parks has only collected information regarding conflict among users at LHRP through a passive process that relies on users to lodge a complaint when a situation arises. We don't believe that has accurately identified existing conflicts or satisfies the goal to fully "evaluate" the trial use of mountain bikes on the LHRP trail system. Our surveyors were asked to comment on interactions with other park users and the results were too limited to be conclusive. However, concerns and conflict seemed to rise when either fast-moving mountain bikes or multiple bike users were on the trails.

The introduction of increased mountain bike use would alter the character of this park. When development encroaches into a valued habitat, it is often said that the birds will find someplace else or the birds will adapt, but the harsh reality, proven by declining population trends for many species, is that many don't. And disturbance into quality habitat often invites fierce competition from species, such as American Crows, Brown-headed Cowbirds, Rock Pigeons, and European Starlings, birds who in excessive numbers can require management plans to control disease and destruction.

In summary, we feel that none of the alternatives currently being considered by Parks to increase mountain bike use in LHRP are compatible with maintaining the robust and diverse bird populations that now exist in the park. The high number of volunteer response to support this survey effort alone suggests that passive users of

this park are many in number and value LHRP as an accessible destination to find refuge and low-impact recreation. We would encourage a step back from the current concepts of a multi-user park that includes increased mountain bike trails and to take a first step of fully identifying the natural resources within the park so that critical habitat areas and biodiversity might be protected. This thoughtful approach toward protection and placing value on wild spaces will preserve LHRP for the enjoyment of current users and for generations to come.

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