

# **Green Island Bird Survey**

**Winter 2008**



**Roger Robb  
McKenzie River Trust  
February 27, 2008**

# **Green Island Bird Survey**

## **Introduction**

Green Island is located in Lane County, Oregon, about two miles west of Coburg, just below the confluence of the McKenzie and Willamette Rivers. The site is approximately 1,000 acres in size and was acquired by the McKenzie River Trust in 2003 for the primary purpose of restoring and managing native habitats for fish, wildlife and plants. This bird census is a follow on study to the work performed by Paul Adamus in 2000.

The objectives of this study are twofold. First, the study will identify and quantify the bird species utilizing Green Island as breeders, migrants and winter residents. Second, the study will detect and quantify population changes and trends over time, specifically related to the restoration of native habitat on Green Island.

## **Methodology**

From April 2006 through February 2007 the survey was conducted utilizing two different methodologies: point count surveys and general surveys. Thirty four survey points were established on Green Island with twenty in the north sector and fourteen in the south sector. Where possible, these survey points corresponded with points used by Paul Adamus in an earlier study. Point count surveys were conducted two to four times per month. Birds were identified and recorded by sight and sound during five minute sessions at each point. General surveys were conducted one to two times per month identifying and recording species, abundance and behavior. General surveys will further identify breeding activity and enhance data from the point count surveys.

Starting in March of 2007 the survey methodology was modified by re-arranging the survey points and reducing the frequency of surveys. Two new survey points were created on the north end of the island to expand our census coverage. Eight survey points were eliminated due to their proximity with each other. Five points were moved 15 to 150 meters to offer better access to habitat types. The point count survey now consists of twenty-eight points, seventeen in the north sector and eleven in the south sector. Point count surveys are now conducted one to two times per month and general surveys one to two times per month.

## **The Winter Season (December – February)**

One point count survey was conducted in December, one in January and one in February. One general survey was conducted in January and two in February. Observers for the period included Kit Larsen and Roger Robb who spent 34 hours in the field.

The birds of the winter season are comprised of wintering migrants, permanent residents and early spring migrants. Waterfowl began arriving at Green Island in the late fall, with overall numbers lower than last winter. Eleven species of ducks and geese used the area throughout the winter season. Wintering shorebirds numbers were low with only Wilson's Snipe, Dunlin and Killdeer found during the season. The most numerous passerines using Green Island during the winter were American Robins and European Starlings. Pine Siskins wintered on the island (there were none last winter) and Purple Finches were found in good numbers compared to last year. Early spring migrants included a Turkey Vulture and two Tree Swallows, both in late February. Unusual sightings for the period included Green Island's first Horned Grebe (2/15), the second Common Loon (2/27/) and the second sighting of Dunlin, 300 on a gravel bar (2/27).

Comparison of the winter season of 2008 to the winter season of 2007 is difficult because the survey points have been re-arranged and reduced, which should affect the number of individuals reported though likely not the number of species. However, there are several changes worth noting and tracking in subsequent years.

Waterfowl numbers were down significantly with the largest decreases in numbers being American Widgeon, (84%), Gadwall (84%), and Ring-necked Duck (73%). On a positive note, Bufflehead were in good numbers throughout the winter compared to only one sighting last year.

Belted Kingfishers, which were found on every count last year, were found only once this winter. On the other hand, Downy Woodpeckers were more numerous than last year.

Several passerine species showed significant increases such as Western Scrub Jays (37%) and Dark-eyed Juncos (129%). However, many showed decreases in numbers found including Ruby-crowned Kinglet (45%), Fox Sparrow (68%), Golden-crowned Sparrow (78%) and Red-winged Blackbird (66%).

No definitive conclusions have been drawn given the limited amount of data. However, we should pay close attention to the significant positive and negative trends in numbers reported and try to understand these trends as they may relate to habitat changes on Green Island.

Fifty-seven species were found on the point count surveys. Thirteen species were found on the general surveys, but not on the point count surveys. These included Horned Grebe, Wood Duck, Green-winged Teal, Great Egret, Turkey Vulture, Merlin, Dunlin, California Gull, Common Loon, Mourning Dove, Hairy Woodpecker, Tree Swallow and American Pipit. Chart I. represents the species found on the winter point count surveys.

## Chart I. Green Island Species Report

	Dec 28th/ 29th	Jan 18th	Feb 5th
<b>Grebes</b>			
Pied-billed Grebe	1	4	3
<b>Cormorants</b>			
Double-crested Cormorant			1
<b>Ducks, Swans, Geese</b>			
Greater White-fronted Goose			
Cackling Goose	1850		805
Canada Goose	36	32	7
Wood Duck			
Eurasian Wigeon			
American Wigeon	30	6	1
Gadwall		4	
Green-winged Teal			
Mallard	30	54	43
Northern Pintail			
Blue-winged Teal			
Northern Shoveler			
Ring-necked Duck	2	16	
Lesser Scaup			
Bufflehead	15	4	11
Hooded Merganser	2		
Common Merganser	5	1	1
<b>Hérons, Egrets &amp; Bitterns</b>			
Great Blue Heron	7	7	6
Great Egret			
Green Heron			
<b>Vultures</b>			
Turkey Vulture			
<b>Diurnal Birds of Prey</b>			
Osprey			
Bald Eagle	2	1	2
Northern Harrier	1		2
Sharp-shinned Hawk			1
Cooper's Hawk		1	
Northern Goshawk			
Red-shouldered Hawk			
Red-tailed Hawk	6	4	5
Rough-legged Hawk			
American Kestrel	3	1	1
Merlin			
Peregrine Falcon	1		

## Chart I. Green Island Species Report

	Dec 28th/ 29th	Jan 18th	Feb 5th
<b><i>Pheasants &amp; Quail</i></b>			
Ring-necked Pheasant			
Wild Turkey	6		6
California Quail			
<b><i>Rails &amp; Coots</i></b>			
Sora			
American Coot	1	1	5
<b><i>Shorebirds</i></b>			
Wilson's Snipe	1		3
Greater Yellowlegs			
Spotted Sandpiper			
Least Sandpiper			
Dunlin			
Killdeer	1		40
<b><i>Gulls &amp; Terns</i></b>			
Ring-billed Gull			17
California Gull			
Glaucous-winged Gull			1
<b><i>Pigeons &amp; Doves</i></b>			
Rock Dove			
Band-tailed Pigeon			
Mourning Dove			
<b><i>Owls</i></b>			
Barn Owl			
Western Screech-Owl			
Great-horned Owl			
Northern Saw-whet Owl			
<b><i>Swifts</i></b>			
Vaux's Swift			
<b><i>Hummingbirds</i></b>			
Anna's Hummingbird			
Rufous Hummingbird			
<b><i>Kingfishers</i></b>			
Belted Kingfisher	1		
<b><i>Woodpeckers</i></b>			
Red-breasted Sapsucker			
Downy Woodpecker	4	4	2
Hairy Woodpecker			
Northern Flicker	6	5	4
Pileated Woodpecker			

## Chart I. Green Island Species Report

	Dec 28th/ 29th	Jan 18th	Feb 5th
<b>Flycatchers</b>			
Olive-sided Flycatcher			
Western Wood-Pee-wee			
Willow Flycatcher			
Hammond's Flycatcher			
Gray Flycatcher			
Dusky Flycatcher			
Pacific-slope Flycatcher			
Black Phoebe	1		1
Western Kingbird			
Eastern Kingbird			
<b>Crows &amp; Jays</b>			
Steller's Jay	14	30	23
Western Scrub-Jay	19	11	13
American Crow	28	9	40
Raven		1	6
<b>Vireos</b>			
Hutton's Vireo			
Cassin's Vireo			
Warbling Vireo			
<b>Waxwings</b>			
Cedar Waxwing			7
<b>Thrushes</b>			
Varied Thrush			
Swainson's Thrush			
Hermit Thrush			
American Robin	236	295	194
<b>Starlings</b>			
European Starling	105	290	138
<b>Nuthatches</b>			
Red-breasted Nuthatch			
White-breasted Nuthatch		1	
<b>Creepers</b>			
Brown Creeper			1
<b>Wrens</b>			
Marsh Wren			
Bewick's Wren	4	10	9
Winter Wren	2	2	
House Wren			
<b>Long-tailed Tits</b>			

Bushtit

		12
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**Chart I. Green Island Species Report**

<b>Dec 28th/ 29th</b>	<b>Jan 18th</b>	<b>Feb 5th</b>
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**Swallows**

Tree Swallow  
 Violet-green Swallow  
 Northern Rough-winged Swallow  
 Cliff Swallow  
 Barn Swallow


**Kinglets**

Ruby-crowned Kinglet  
 Golden-crowned Kinglet

4	8	2
10	11	3

**Old World Warblers**

Wrentit

		1
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**Chickadees & Tits**

Black-capped Chickadee

12	11	10
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**Larks**

Horned Lark

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**Old World Sparrows**

House Sparrow

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**Wagtails & Pipits**

American Pipit

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**Siskins, Crossbills & Finches**

Pine Siskin  
 American Goldfinch  
 Lesser Goldfinch  
 Purple Finch  
 House Finch  
 Evening Grosbeak

1	110	40
1		4
12	4	

**New World Warblers**

Orange-crowned Warbler  
 Nashville Warbler  
 Yellow Warbler  
 Yellow-rumped Warbler  
 Black-throated Gray Warbler  
 Townsend's Warbler  
 Hermit Warbler  
 MacGillivray's Warbler  
 Common Yellowthroat  
 Wilson's Warbler  
 Yellow-breasted Chat

		6

**Buntings, Sparrows,  
Tanagers & Allies**

Fox Sparrow

6	2	1
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**Chart I. Green Island Species Report**

	<b>Dec 28th/ 29th</b>	<b>Jan 18th</b>	<b>Feb 5th</b>
Song Sparrow	60	49	55
Lincoln's Sparrow		1	1
White-crowned Sparrow			
White-throated Sparrow			
Golden-crowned Sparrow	2		2
Dark-eyed Junco	60	23	21
Savannah Sparrow			
Chipping Sparrow			
Brewer's Sparrow			
Vesper Sparrow			
Spotted Towhee	9	6	9
Western Tanager			
Black-headed Grosbeak			
Lazuli Bunting			
<b>Blackbirds &amp; Orioles</b>			
Bullock's Oriole			
Red-winged Blackbird		2	4
Western Meadowlark	10		
Brewer's Blackbird			
Brown-headed Cowbird			

**Breeding Birds**

The breeding status of the birds of Green Island is established using the methodology developed and used by the Oregon Breeding Bird Atlas published in 2001. The methodology captures criteria that define birds as possible breeders, probable breeders and confirmed breeders. For example, a criterion for possible breeding would be a bird seen or heard on one date during the breeding season. One of the criteria for probable breeding would be a pair (adult male and female) seen during the breeding season. And, one of the criteria for confirmed breeding would be recently fledged young attended by an adult.

Fifty-nine species of birds are suspected of breeding at Green Island with 39 confirmed, 15 probable and 5 possible breeders. Some breeding activity was noted in February including Canada Geese and American Kestrels forming pairs. Chart II lists the breeding birds of Green Island.



## Chart II. Green Island Breeding Birds

	Confirmed	Probable	Possible
<b>Grebes</b>			
Pied-billed Grebe	x		
<b>Ducks, Swans, Geese</b>			
Canada Goose	x		
Wood Duck	x		
Mallard	x		
<b>Hérons, Egrets &amp; Bitterns</b>			
Great Blue Heron	x		
Green Heron			x
<b>Vultures</b>			
Turkey Vulture			x
<b>Diurnal Birds of Prey</b>			
Osprey	x		
Bald Eagle	x		
Red-tailed Hawk	x		
American Kestrel		x	
<b>Pheasants &amp; Quail</b>			
Ring-necked Pheasant		x	
California Quail	x		
<b>Shorebirds</b>			
Spotted Sandpiper	x		
Killdeer	x		
<b>Pigeons &amp; Doves</b>			
Mourning Dove	x		
<b>Owls</b>			
Great Horned Owl	x		
<b>Hummingbirds</b>			
Rufous Hummingbird		x	
<b>Kingfishers</b>			
Belted Kingfisher	x		
<b>Woodpeckers</b>			
Red-breasted Sapsucker	x		
Downy Woodpecker		x	
Northern Flicker		x	
<b>Flycatchers</b>			
Olive-sided Flycatcher	x		
Western Wood-Peevee	x		
Willow Flycatcher		x	
Western Kingbird	x		
<b>Crows &amp; Jays</b>			
Steller's Jay		x	
Western Scrub-Jay	x		

American Crow  
**Chart II. Green Island Breeding Birds**

	x	
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Confirmed	Probable	Possible
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**Vireos**

- Cassin's Vireo
- Warbling Vireo

	x	
x		

**Waxwings**

- Cedar Waxwing

	x	
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**Thrushes**

- Swainson's Thrush
- American Robin

	x	
x		

**Starlings**

- European Starling

x		
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**Creepers**

- Brown Creeper

		x
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**Wrens**

- Bewick's Wren
- House Wren

	x	
x		

**Long-tailed Tits**

- Bushtit

x		
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**Swallows**

- Tree Swallow
- Northern Rough-winged Swallow
- Barn Swallow

x		
x		
x		

**Kinglets**

- Golden-crowned Kinglet

	x	
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**Old World Warblers**

- Wrentit

x		
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**Chickadees & Tits**

- Black-capped Chickadee

x		
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**Siskins, Crossbills & Finches**

- American Goldfinch
- House Finch

x		
		x

**New World Warblers**

- Orange-crowned Warbler
- Yellow Warbler
- Common Yellowthroat
- Wilson's Warbler

	x	
x		
x		
		x

**Buntings, Sparrows, Tanagers & Allies**

- Song Sparrow
- Savannah Sparrow
- Spotted Towhee
- Black-headed Grosbeak
- Lazuli Bunting

x		
	x	
x		
x		
x		

## Chart II. Green Island Breeding Birds

	<u>Confirmed</u>	<u>Probable</u>	<u>Possible</u>
<b><i>Blackbirds &amp; Orioles</i></b>			
Bullock's Oriole	x		
Red-winged Blackbird	x		
Brown-headed Cowbird	x		
	39	15	5

## Green Island Bird Checklist

A checklist of the birds of Green Island has been developed utilizing sightings from the historical studies by Paul Adamus and Leroy Fish, historical observations by Kit Larsen and George Grier and data collected during the current study. The Green Island bird list currently stands at 150 species. One new species were added to the list during the winter season.

Horned Grebe 2/15

Chart III is a checklist of birds found at Green Island.

### Chart III. Green Island Bird Checklist

**Grebes**

Pied-billed Grebe  
Horned Grebe

**Cormorants**

Dbl-crested Cormorant

**Ducks, Swans & Geese**

Tundra Swan  
Gr. White-fronted Goose  
Cackling Goose  
Canada Goose  
Wood Duck  
Eurasian Widgeon  
American Widgeon  
Gadwall  
Green-winged Teal  
Mallard  
Northern Pintail  
Ring-necked Duck  
Lesser Scaup  
Bufflehead  
Hooded Merganser  
Common Merganser

**Herons, Egrets & Bitterns**

Great Blue Heron  
Great Egret  
Green Heron

**Vultures**

Turkey Vulture

**Diurnal Birds of Prey**

Osprey  
Bald Eagle  
Northern Harrier  
Sharp-shinned Hawk  
Cooper's Hawk  
Northern Goshawk  
Red-shouldered Hawk  
Red-tailed Hawk  
Rough-legged Hawk  
American Kestrel  
Merlin  
Peregrine Falcon

**Pheasants & Quail**

Ring-necked Pheasant  
Wild Turkey  
California Quail

**Rails & Coots**

Sora

American Coot

**Shorebirds**

Wilson's Snipe  
Greater Yellowlegs  
Lesser Yellowlegs  
Solitary Sandpiper  
Spotted Sandpiper  
Least Sandpiper  
Dunlin  
Killdeer

**Gulls & Terns**

Ring-billed Gull  
California Gull  
Glaucous-winged Gull

**Loons**

Common Loon

**Pigeons & Doves**

Rock Pigeon  
Band-tailed Pigeon  
Mourning Dove

**Owls**

Western Screech-Owl  
Barn Owl  
Great Horned Owl  
Northern Saw-whet Owl

**Swifts**

Vaux's Swift

**Hummingbirds**

Anna's Hummingbird  
Rufous Hummingbird

**Kingfishers**

Belted Kingfisher

**Woodpeckers**

R-b Sapsucker  
Downy Woodpecker  
Hairy Woodpecker  
Northern Flicker  
Pileated Woodpecker

**Flycatchers**

Olive-sided Flycatcher  
Western Wood-Pee-wee  
Willow Flycatcher  
Hammond's Flycatcher  
Gray Flycatcher  
Pacific-slope Flycatcher  
Black Phoebe

Gray Flycatcher

Dusky Flycatcher  
Western Kingbird  
Eastern Kingbird

**Crows & Jays**

Steller's Jay  
Western Scrub-Jay  
American Crow  
Common Raven

**Vireos**

Hutton's Vireo  
Cassin's Vireo  
Warbling Vireo

**Waxwings**

Cedar Waxwing

**Thrushes**

Varied Thrush  
Swainson's Thrush  
Hermit Thrush  
American Robin

**Starlings**

European Starling

**Nuthatches**

Red-breasted Nuthatch  
White-breasted Nuthatch

**Creepers**

Brown Creeper

**Wrens**

Marsh Wren  
Bewick's Wren  
Winter Wren  
House Wren

**Long-tailed Tits**

Bushtit

**Swallows**

Tree Swallow  
Violet-green Swallow  
N. R-w Swallow  
Barn Swallow  
Cliff Swallow

**Kinglets**

Ruby-crowned Kinglet  
Golden-crowned Kinglet

**Old World Warblers**

Wrentit

**Chickadees & Tits**

Black-capped Chickadee

**Larks**

Horned Lark

**Old World Sparrows**

House Sparrow

**Wagtails & Pipits**

American Pipit

**Finches & Allies**

Pine Siskin  
American Goldfinch  
Lesser Goldfinch  
Purple Finch  
House Finch  
Evening Grosbeak

**New World Warblers**

Orange-crowned Warbler  
Nashville Warbler  
Yellow Warbler  
Yellow-rumped Warbler  
Bl-throated Gray Warbler  
Townsend's Warbler  
Hermit Warbler  
MacGillivray's Warbler  
Common Yellowthroat  
Wilson's Warbler  
Yellow-breasted Chat

**Buntings, Sparrows,**

**Tanagers & Allies**

Fox Sparrow  
Song Sparrow  
Lincoln's Sparrow  
White-crowned Sparrow  
White-throated Sparrow  
Golden-crowned Sparrow  
Dark-eyed Junco  
Savannah Sparrow  
Chipping Sparrow  
Brewer's Sparrow  
Vesper Sparrow  
Spotted Towhee  
Western Tanager  
Black-headed Grosbeak  
Lazuli Bunting

**Blackbirds & Orioles**

Bullock's Oriole  
Red-winged Blackbird  
Western Meadowlark  
Brewer's Blackbird  
Brown-headed Cowbird

