

# **Green Island Bird Survey**

**Fall 2008**



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McKenzie River Trust  
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# **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 Fall Season (Aug – Nov)**

Single point count surveys were conducted in August, September, October and November. General surveys were conducted in each month as well. Observers for the period included Kit Larsen and Roger Robb who spent 35 hours in the field.

The birds of the fall season are comprised of lingering summer breeders, fall migrants and arriving winter residents. Most neotropical birds had departed from Green Island in August with a few warblers, Black-throated Gray and Common Yellowthroat, remaining into September and Tree and Violet-green Swallows (found on an MRT bird walk) lingering into October. A Western Wood Pewee found on September 30<sup>th</sup> was the latest date for Green Island. Black Phoebes continue to be regular and are now found at several points on the island. Waterfowl began to arrive in September with flocks of Canada and Cackling Geese and smaller numbers of Mallards and American Widgeon. The first Ring-necked Ducks arrived in November. Small numbers of shorebirds arrived or passed through the island including six Least Sandpipers, only the second sighting for Green Island. Winter passerines began to arrive in October, including Pine Siskins, Fox Sparrows, Lincoln's Sparrows, Golden-crowned Sparrows and Dark-eyed Juncos. Wintering Western Meadowlarks arrived in late September.

Waterfowl numbers were up for Pied-billed Grebe (15%), American Widgeon (108%) and Mallard (23%). Several species were found in reduced numbers including Cackling Goose (43%), Canada Goose (76%), Wood Duck (48%) and Common Merganser (96%). Some of these lower counts may be attributable to the construction work carried out at Crescent Lake during the season.

Osprey and American Kestrel sightings were down 70% and 67%, respectively, from the same period in 2007. No Bald Eagles were found on point count surveys, though two adults were found on general surveys in August and October. Red-tailed Hawks, on the other hand, increased by 52%.

Other non-passerines found in lower numbers included Great Blue Heron down 29%, Belted Kingfisher down 36% and Downy Woodpecker down 29%. Wild Turkeys, which were regular last fall, were not found on point count surveys and only one was found on a general survey in August.

Many permanent and winter resident passerines increased in numbers. These included American Robin up 36%, Bushtit up 175%, Ruby-crowned Kinglet up 83%, Black-capped Chickadee up 10%, Song Sparrow up 34%, Dark-eyed Junco up 74% and Spotted Towhee up 23%. Permanent and winter residents that decreased included Golden-crowned Kinglet down 73%, American Goldfinch down 41% and Fox Sparrow down 38%.

While no definitive conclusions have been drawn given the limited amount of data, we should pay close attention to the negative trends for many species. Overall population fluctuations could have an impact on numbers of birds on Green Island, particularly for waterfowl and raptors. And, the construction activities on the island may have created a temporary disturbance. However, the decrease in numbers of some species could be the result of changing habitat as we remove invasive plants and plant native species.

Eighty-three species were found on the point count surveys. Twelve species were found on the general surveys, but not on the point count surveys. These included Green Heron,

Bald Eagle, Wild Turkey, Vaux’s Swift, Pacific-slope Flycatcher, Common Raven, Lesser Goldfinch, Purple Finch, House Finch, Orange-crowned Warbler, Wilson’s Warbler and Brewer’s Blackbird. Chart I. represents the species found on the fall point count surveys.

**Chart I. Green Island Species Report**

	<b>Aug 3rd</b>	<b>Sep 30th</b>	<b>Oct 27th</b>	<b>Nov 16th</b>
<b><i>Grebes</i></b>				
Pied-billed Grebe	2	9	21	10
<b><i>Cormorants</i></b>				
Double-crested Cormorant		8	9	3
<b><i>Ducks, Swans, Geese</i></b>				
Greater White-fronted Goose				
Cackling Goose		110	190	102
Canada Goose	2	38	3	2
Wood Duck	14	3		2
Eurasian Wigeon				
American Wigeon		5	15	7
Gadwall			4	
Green-winged Teal		2		
Mallard	15	36	30	7
Northern Pintail				
Blue-winged Teal				
Northern Shoveler				
Ring-necked Duck				2
Lesser Scaup				
Bufflehead				
Hooded Merganser			1	
Common Merganser		3		
<b><i>Hérons, Egrets &amp; Bitterns</i></b>				
Great Blue Heron	5	9	7	1
Great Egret		1		
Green Heron				
<b><i>Vultures</i></b>				
Turkey Vulture	8	2		
<b><i>Diurnal Birds of Prey</i></b>				
Osprey	4			
Bald Eagle				
Northern Harrier			1	
Sharp-shinned Hawk		1		
Cooper's Hawk			1	
Northern Goshawk				
Red-shouldered Hawk				

## Chart I. Green Island Species Report

	Aug 3rd	Sep 30th	Oct 27th	Nov 16th
Red-tailed Hawk	3	6	5	2
Rough-legged Hawk				
American Kestrel			2	1
Merlin				
Peregrine Falcon				
<b>Pheasants &amp; Quail</b>				
Ring-necked Pheasant				
Wild Turkey				
California Quail	17			1
<b>Rails &amp; Coots</b>				
Virginia Rail				
Sora				
American Coot				
<b>Shorebirds</b>				
Wilson's Snipe				
Greater Yellowlegs			4	1
Spotted Sandpiper	4		2	
Least Sandpiper	6			
Dunlin				
Killdeer	1	6	3	2
<b>Gulls &amp; Terns</b>				
Ring-billed Gull				
California Gull				
Glaucous-winged Gull				
<b>Loons</b>				
Common Loon				
<b>Pigeons &amp; Doves</b>				
Rock Dove				
Band-tailed Pigeon				
Mourning Dove	24			
<b>Owls</b>				
Barn Owl				
Western Screech-Owl				
Great-horned Owl	1			
Northern Saw-whet Owl				
<b>Swifts</b>				
Vaux's Swift				
<b>Hummingbirds</b>				
Anna's Hummingbird				
Rufous Hummingbird	1			
<b>Kingfishers</b>				
Belted Kingfisher		6	5	5

## Chart I. Green Island Species Report

	Aug 3rd	Sep 30th	Oct 27th	Nov 16th
<b>Woodpeckers</b>				
Red-breasted Sapsucker				
Downy Woodpecker	4	2	2	1
Hairy Woodpecker			1	
Northern Flicker	8	19	11	9
Pileated Woodpecker		1		
<b>Flycatchers</b>				
Olive-sided Flycatcher				
Western Wood-Pee-wee	34	1		
Willow Flycatcher	4			
Hammond's Flycatcher				
Gray Flycatcher				
Dusky Flycatcher				
Pacific-slope Flycatcher				
Black Phoebe		2	2	
Western Kingbird				
Eastern Kingbird				
<b>Crows &amp; Jays</b>				
Steller's Jay	4	14	11	8
Western Scrub-Jay	5	17	15	6
American Crow	1		127	
Raven				
<b>Vireos</b>				
Hutton's Vireo				
Cassin's Vireo	1			
Warbling Vireo	1			
<b>Waxwings</b>				
Cedar Waxwing	16	79	7	2
<b>Thrushes</b>				
Varied Thrush			2	
Swainson's Thrush	4			
Hermit Thrush				
American Robin	25	82	7	8
<b>Starlings</b>				
European Starling	78	27	19	113
<b>Nuthatches</b>				
Red-breasted Nuthatch	1	1		
White-breasted Nuthatch		1	1	
<b>Creepers</b>				
Brown Creeper		1	3	
<b>Wrens</b>				
Marsh Wren				

## Chart I. Green Island Species Report

	Aug 3rd	Sep 30th	Oct 27th	Nov 16th
Bewick's Wren	12	20	14	6
Winter Wren			3	4
House Wren				
<b>Long-tailed Tits</b>				
Bushtit	2	20		
<b>Swallows</b>				
Tree Swallow	318			
Violet-green Swallow	1			
Northern Rough-winged Swallow	6			
Cliff Swallow	1			
Barn Swallow	15			
<b>Kinglets</b>				
Ruby-crowned Kinglet			18	4
Golden-crowned Kinglet		1	1	1
<b>Old World Warblers</b>				
Wrentit				1
<b>Chickadees &amp; Tits</b>				
Black-capped Chickadee	15	20	28	10
<b>Larks</b>				
Horned Lark				
<b>Old World Sparrows</b>				
House Sparrow				
<b>Wagtails &amp; Pipits</b>				
American Pipit				2
<b>Siskins, Crossbills &amp; Finches</b>				
Pine Siskin			4	77
American Goldfinch	12	14	2	
Lesser Goldfinch				
Purple Finch				
House Finch				
Evening Grosbeak				
<b>New World Warblers</b>				
Orange-crowned Warbler				
Nashville Warbler				
Yellow Warbler	3			
Yellow-rumped Warbler		4		3
Black-throated Gray Warbler		1		
Townsend's Warbler				
Hermit Warbler				
MacGillivray's Warbler				

## Chart I. Green Island Species Report

	Aug 3rd	Sep 30th	Oct 27th	Nov 16th
Common Yellowthroat	32	5		
Wilson's Warbler				
Yellow-breasted Chat				
<b><i>Buntings, Sparrows, Tanagers &amp; Allies</i></b>				
Fox Sparrow			9	7
Song Sparrow	48	79	124	93
Lincoln's Sparrow		2	5	3
White-crowned Sparrow				1
White-throated Sparrow				
Golden-crowned Sparrow		2	1	3
Dark-eyed Junco			20	34
Savannah Sparrow		13		9
Chipping Sparrow				
Brewer's Sparrow				
Vesper Sparrow				
Spotted Towhee	11	14	18	16
Western Tanager	1			
Black-headed Grosbeak	9			
Lazuli Bunting	2			
<b><i>Blackbirds &amp; Orioles</i></b>				
Bullock's Oriole	1			
Red-winged Blackbird	2	46	6	2
Western Meadowlark		2	7	
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.



Sixty species of birds are suspected of breeding at Green Island with 40 confirmed, 15 probable and 5 possible breeders. Family groups of California Quail were observed in August and September. And, a juvenile Green Heron was observed at the ferry crossing in late August. Green Herons are suspected breeders on Green Island, though breeding still needs to be confirmed.

Chart II lists the breeding birds of Green Island.

**Chart II. Green Island Breeding Birds**

	<u>Confirmed</u>	<u>Probable</u>	<u>Possible</u>
<b><i>Grebes</i></b>			
Pied-billed Grebe	x		
<b><i>Ducks, Swans, Geese</i></b>			
Canada Goose	x		
Wood Duck	x		
Mallard	x		
<b><i>Hérons, Egrets &amp; Bitterns</i></b>			
Great Blue Heron	x		
Green Heron			x
<b><i>Vultures</i></b>			
Turkey Vulture			x
<b><i>Diurnal Birds of Prey</i></b>			
Osprey	x		
Bald Eagle	x		
Red-tailed Hawk	x		
American Kestrel		x	
<b><i>Pheasants &amp; Quail</i></b>			
Ring-necked Pheasant		x	
California Quail	x		
<b><i>Shorebirds</i></b>			
Spotted Sandpiper	x		
Killdeer	x		
<b><i>Pigeons &amp; Doves</i></b>			
Mourning Dove	x		
<b><i>Owls</i></b>			
Great Horned Owl	x		
<b><i>Hummingbirds</i></b>			
Rufous Hummingbird		x	
<b><i>Kingfishers</i></b>			
Belted Kingfisher	x		

## Chart II. Green Island Breeding Birds

	Confirmed	Probable	Possible
<b>Woodpeckers</b>			
Red-breasted Sapsucker	x		
Downy Woodpecker		x	
Northern Flicker	x		
<b>Flycatchers</b>			
Olive-sided Flycatcher	x		
Western Wood-Pee wee	x		
Willow Flycatcher		x	
Western Kingbird	x		
<b>Crows &amp; Jays</b>			
Steller's Jay		x	
Western Scrub-Jay	x		
American Crow		x	
<b>Vireos</b>			
Cassin's Vireo		x	
Warbling Vireo	x		
<b>Waxwings</b>			
Cedar Waxwing		x	
<b>Thrushes</b>			
Swainson's Thrush		x	
American Robin	x		
<b>Starlings</b>			
European Starling	x		
<b>Creepers</b>			
Brown Creeper			x
<b>Wrens</b>			
Bewick's Wren		x	
House Wren	x		
<b>Long-tailed Tits</b>			
Bushtit	x		
<b>Swallows</b>			
Tree Swallow	x		
Northern Rough-winged Swallow	x		
Barn Swallow	x		
<b>Kinglets</b>			
Golden-crowned Kinglet		x	
<b>Old World Warblers</b>			
Wrentit	x		
<b>Chickadees &amp; Tits</b>			
Black-capped Chickadee	x		

## Chart II. Green Island Breeding Birds

	Confirmed	Probable	Possible
<b><i>Siskins, Crossbills &amp; Finches</i></b>			
American Goldfinch	x		
House Finch			x
<b><i>New World Warblers</i></b>			
Orange-crowned Warbler		x	
Yellow Warbler	x		
Common Yellowthroat	x		
Wilson's Warbler			x
<b><i>Buntings, Sparrows, Tanagers &amp; Allies</i></b>			
Song Sparrow	x		
Savannah Sparrow		x	
Chipping Sparrow		x	
Spotted Towhee	x		
Black-headed Grosbeak	x		
Lazuli Bunting	x		
<b><i>Blackbirds &amp; Orioles</i></b>			
Bullock's Oriole	x		
Red-winged Blackbird	x		
Brown-headed Cowbird	x		
<b>Total</b>	40	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 152 species. No new species were added to the list during the fall season.

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

### **Hérons, 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**

Virginia Rail  
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  
Say's Phoebe  
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

