

Green Island Bird Survey

Summer 2007



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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 Summer Season (June – July)

One point count survey was conducted in June and two in July. Four general surveys were conducted in June and one in July. Observers for the period included Kit Larsen and Roger Robb who spent 53 hours in the field.

The birds of the summer season are primarily breeding birds with the exception of a few early fall migrants such as Greater Yellowlegs, Least Sandpiper and Western Tanager. Also of note were two immature Green Herons and an immature Black Phoebe at the ferry in mid July. These species may breed on Green Island, though we have found no evidence, or these young birds may have wandered to the island after fledging.

Comparison of the summer season of 2007 to the summer season of 2006 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. In fact, comparing June and July point count observations for the two years, the number of species is identical. However, there are several changes worth noting and tracking in subsequent years.

- California Quail* - numbers were down 80% from 2006.
- Band-tailed Pigeon* - numbers down 94% from 2006.
- Belted Kingfisher* - numbers down 46% from 2006.
- Red-breasted Sapsucker* - absent in 2007; breeding established in 2006.
- Downy Woodpecker* - numbers down 35% from 2006.
- Willow Flycatcher* - numbers down 49% from 2006.
- Cassin's Vireo* - numbers down 78% from 2006.
- House Wren* - absent in 2006; breeding established in 2007.
- N. Rough-winged Swallow* - numbers up 63% over 2006.
- Cliff Swallow* - absent in 2006; common in 2007.
- Golden-crowned Kinglet* - absent in 2007; 2-4 birds in 2006.
- Black-capped Chickadee* - numbers down 38% from 2006.
- Spotted Towhee* - numbers down 55% from 2006.
- Black-headed Grosbeak* - numbers up 33% from 2006.

No conclusions have been drawn given the limited amount of data.

Sixty-five species were found on the point count surveys. Ten species were found on the general surveys, but not on the point count surveys. These included Green Heron, Barn Owl, Western Screech-owl, Great Horned Owl, Red-breasted Sapsucker, Pileated Woodpecker, Black Phoebe, White-breasted Nuthatch, Lesser Goldfinch and House Finch. Chart I. represents the species found on the summer point count surveys.

Chart 1. Green Island Species Report

	Jun 7th/ 8th	5th/ 6th	Jul 17th/ 18th
Grebes			
Pied-billed Grebe	1		
Cormorants			
Double-crested Cormorant	1		
Ducks, Swans, Geese			
Greater White-fronted Goose			
Cackling Goose			
Canada Goose	15		
Wood Duck	9	8	3
Eurasian Wigeon			
American Wigeon			
Gadwall			
Green-winged Teal			
Mallard	8		4
Northern Pintail			
Blue-winged Teal			
Northern Shoveler			
Ring-necked Duck			
Lesser Scaup			
Bufflehead			
Hooded Merganser			
Common Merganser	1		
Hérons, Egrets & Bitterns			
Great Blue Heron	7	15	7
Great Egret			
Green Heron			
Vultures			
Turkey Vulture	11	31	
Diurnal Birds of Prey			
Osprey	6	9	8
Bald Eagle	2	4	1
Northern Harrier			
Sharp-shinned Hawk			
Cooper's Hawk	1		
Northern Goshawk			
Red-shouldered Hawk			
Red-tailed Hawk	5	5	4
Rough-legged Hawk			
American Kestrel		2	1
Merlin			
Peregrine Falcon			

Chart 1. Green Island Species Report

	Jun 7th/ 8th	Jul 5th/ 6th	Jul 17th/ 18th
Pheasants & Quail			
Ring-necked Pheasant			
Wild Turkey			6
California Quail	2	3	4
Rails & Coots			
Sora			
American Coot			
Shorebirds			
Wilson's Snipe			
Greater Yellowlegs			1
Spotted Sandpiper	2	1	6
Least Sandpiper			3
Dunlin			
Killdeer	2	2	
Gulls & Terns			
Ring-billed Gull			
Glaucous-winged Gull			
Pigeons & Doves			
Rock Dove			
Band-tailed Pigeon	1		
Mourning Dove	16	18	12
Owls			
Barn Owl			
Western Screech-Owl			
Great-horned Owl			
Northern Saw-whet Owl			
Swifts			
Vaux's Swift	2		
Hummingbirds			
Anna's Hummingbird			
Rufous Hummingbird	2	1	
Kingfishers			
Belted Kingfisher	3		2
Woodpeckers			
Red-breasted Sapsucker			
Downy Woodpecker	2	7	3
Hairy Woodpecker		1	
Northern Flicker	4	12	9
Pileated Woodpecker			
Flycatchers			
Olive-sided Flycatcher			

Chart 1. Green Island Species Report

	Jun 7th/ 8th	5th/ 6th	Jul 17th/ 18th
Western Wood-Pee wee	39	25	22
Willow Flycatcher	3	4	2
Hammond's Flycatcher			
Gray Flycatcher			
Dusky Flycatcher			
Pacific-slope Flycatcher			
Black Phoebe			
Western Kingbird		1	
Eastern Kingbird			
Crows & Jays			
Steller's Jay	10	14	11
Western Scrub-Jay	16	12	9
American Crow	7	10	14
Raven			
Vireos			
Hutton's Vireo			
Cassin's Vireo		1	
Warbling Vireo	5	5	2
Waxwings			
Cedar Waxwing	31	18	15
Thrushes			
Varied Thrush			
Swainson's Thrush	30	18	26
Hermit Thrush			
American Robin	44	83	85
Starlings			
European Starling	69	28	330
Nuthatches			
Red-breasted Nuthatch			
White-breasted Nuthatch			
Creepers			
Brown Creeper	1		
Wrens			
Marsh Wren			
Bewick's Wren	6	8	7
Winter Wren			
House Wren	2	3	3
Long-tailed Tits			
Bushtit	6	4	
Swallows			
Tree Swallow	11	12	38

Chart 1. Green Island Species Report

	Jun 7th/ 8th	5th/ 6th	Jul 17th/ 18th
Violet-green Swallow			26
Northern Rough-winged Swallow	8	6	30
Cliff Swallow	6	71	
Barn Swallow	5	5	11
Kinglets			
Ruby-crowned Kinglet			
Golden-crowned Kinglet			
Old World Warblers			
Wrenit			
Chickadees & Tits			
Black-capped Chickadee	9	23	14
Larks			
Horned Lark			
Old World Sparrows			
House Sparrow			
Wagtails & Pipits			
American Pipit			
Siskins, Crossbills & Finches			
Pine Siskin			
American Goldfinch	36	23	22
Lesser Goldfinch			
Purple Finch			
House Finch			
Evening Grosbeak			
New World Warblers			
Orange-crowned Warbler			1
Nashville Warbler			
Yellow Warbler	11	9	5
Yellow-rumped Warbler			
Black-throated Gray Warbler			
Townsend's Warbler			
Hermit Warbler			
MacGillivray's Warbler			
Common Yellowthroat	29	57	38
Wilson's Warbler			
Yellow-breasted Chat	1		
Buntings, Sparrows, Tanagers & Allies			
Fox Sparrow			
Song Sparrow	60	65	68
Lincoln's Sparrow			

Chart 1. Green Island Species Report

	Jun 7th/ 8th	5th/ 6th	Jul 17th/ 18th
White-crowned Sparrow			
White-throated Sparrow			
Golden-crowned Sparrow			
Dark-eyed Junco			
Savannah Sparrow	3	4	5
Chipping Sparrow			
Brewer's Sparrow			
Vesper Sparrow			
Spotted Towhee	14	11	21
Western Tanager		1	4
Black-headed Grosbeak	51	50	30
Lazuli Bunting	4	2	5
Blackbirds & Orioles			
Bullock's Oriole	11	10	8
Red-winged Blackbird	16	7	5
Western Meadowlark	1		
Brewer's Blackbird	4		
Brown-headed Cowbird	20	11	12

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 37 confirmed, 17 probable and 5 possible breeders. Four species have been upgraded from probable breeders to confirmed breeders including Mourning Dove, Black-capped Chickadee, American Goldfinch and Yellow Warbler. Two other species that were not suspected of breeding, Western Kingbird and House Wren, have been confirmed as breeders.

All three Osprey nests were successful with the two nests on the north end of the island producing one and three young and the nest in the south producing one and possibly two

young. Two to three recently fledged Bald Eagles were observed during the season indicating successful breeding again of the pair near point 13. Chart II lists the breeding birds of Green Island.

Chart II. Green Island Breeding Birds

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

Chart II. Green Island Breeding Birds

	Confirmed	Probable	Possible
Western Wood-Pee wee	X		
Willow Flycatcher		X	
Western Kingbird	X		
Crows & Jays			
Steller's Jay		X	
Western Scrub-Jay	X		
American Crow		X	
Vireos			
Cassin's Vireo		X	
Warbling Vireo	X		
Waxwings			
Cedar Waxwing		X	
Thrushes			
Swainson's Thrush		X	
American Robin	X		
Starlings			
European Starling	X		
Creepers			
Brown Creeper			X
Wrens			
Bewick's Wren		X	
House Wren	X		
Long-tailed Tits			
Bushtit	X		
Swallows			
Tree Swallow	X		
Northern Rough-winged Swallow	X		
Barn Swallow	X		
Kinglets			
Golden-crowned Kinglet		X	
Old World Warblers			
Wrentit		X	
Chickadees & Tits			
Black-capped Chickadee	X		
Siskins, Crossbills & Finches			
American Goldfinch	X		
House Finch			X
New World Warblers			
Orange-crowned Warbler		X	
Yellow Warbler	X		
Common Yellowthroat	X		
Wilson's Warbler			X

Chart II. Green Island Breeding Birds

	Confirmed	Probable	Possible
<i>Buntings, Sparrows, Tanagers & Allies</i>			
Song Sparrow	x		
Savannah Sparrow		x	
Spotted Towhee	x		
Black-headed Grosbeak	x		
Lazuli Bunting		x	
<i>Blackbirds & Orioles</i>			
Bullock's Oriole	x		
Red-winged Blackbird	x		
Brown-headed Cowbird	x		
Total	37	17	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 145 species. One new species was added to the list during the summer season.

Least Sandpiper 7/17

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

Chart III. Green Island Bird Checklist

Grebes

Pied-billed Grebe

Cormorants

Dbl-crested Cormorant

Ducks, Swans & Geese

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

Sora

American Coot

Shorebirds

Wilson's Snipe

Greater Yellowlegs

Lesser Yellowlegs

Spotted Sandpiper

Least Sandpiper

Dunlin

Killdeer

Gulls & Terns

Ring-billed Gull

Glaucous-winged Gull

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

