

Green Island Bird Survey

Spring 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 Spring Season (March – May)

One point count survey was conducted in March, two in April and two in May. One general survey was conducted in April and one in May. Observers for the period included Kit Larsen and Roger Robb who spent 53 hours in the field.

The spring season represents a mixture of wintering birds in the first half of the period, migrants throughout the period and breeding birds that are both permanent residents and returning migrants. Wintering ducks remained in good numbers, particularly American Widgeon and Ring-necked Ducks, through the middle of April. Of note were sixteen Great Egrets perched in a cottonwood near the ferry in early March. Early migrants such as swallows and warblers began to appear in April followed by flycatchers, Swainson's Thrush, Black-headed Grosbeaks and others in May. An unusual find and a first for Green Island was a Sora calling from the old McKenzie channel near point 9. In the same area was a flock of six Wild Turkeys, another first for Green Island, and a pair of Western Kingbirds, only the second sighting of this species.

Comparison of the spring season of 2007 to the spring season of 2006 is difficult for two reasons. First, surveys were not begun until mid-April in 2006. Second, 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, comparing April and May observations for the two years, the number of species and individuals is remarkably consistent. There are a few changes worth noting and tracking in subsequent years.

Northern Harrier – this species was absent in 2007; 1-2 birds were observed in 2006.

Barn Owl – this species was absent in 2007; the Barn Owl that roosted near point 27 was likely killed by a Great Horned Owl.

House Finch – this species was absent in 2007; 3-5 birds were observed in 2006.

Orange-crowned Warbler – numbers were down 62% from 2006.

Song Sparrow – numbers were up 29% over 2006.

Wintering sparrows (White-crowned, Golden-crowned & Lincoln's) – numbers were down 85% from 2006.

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

Ninety 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 Ring-necked Pheasant, Greater Yellowlegs, Rock Dove, Band-tailed Pigeon, Western Screech-Owl, Western Kingbird, Bushtit, Wrentit, Evening Grosbeak and Chipping Sparrow. Chart I. represents the species found on the spring point count surveys.

Chart 1. Green Island Species Report

| | Mar 4th/ 5th | Apr 3rd/ 5th | 23rd | May 4th/ 6th | 20th/ 21st |
|--------------------------------------|--------------------|--------------------|------|--------------------|---------------|
| Grebes | | | | | |
| Pied-billed Grebe | 5 | 1 | | | |
| Cormorants | | | | | |
| Double-crested Cormorant | 79 | 3 | 3 | 2 | |
| Ducks, Swans, Geese | | | | | |
| Greater White-fronted Goose | | | | | |
| Cackling Goose | 90 | 30 | | | |
| Canada Goose | 44 | 10 | 16 | 22 | 2 |
| Wood Duck | 4 | 17 | 10 | 6 | 15 |
| Eurasian Wigeon | | | | | |
| American Wigeon | 145 | 113 | 33 | 6 | |
| Gadwall | 15 | 4 | 2 | | |
| Green-winged Teal | 2 | 12 | 3 | | |
| Mallard | 72 | 35 | 9 | 19 | 15 |
| Northern Pintail | | | | | |
| Blue-winged Teal | | | | | |
| Northern Shoveler | | | | | |
| Ring-necked Duck | 43 | 41 | | | |
| Lesser Scaup | | | | | |
| Bufflehead | 1 | | | | |
| Hooded Merganser | 4 | | | | |
| Common Merganser | 6 | 6 | 5 | 6 | 4 |
| Hérons, Egrets & Bitterns | | | | | |
| Great Blue Heron | 12 | 8 | 5 | 4 | 5 |
| Great Egret | 16 | | | | |
| Green Heron | | | | | |
| Vultures | | | | | |
| Turkey Vulture | | 6 | 16 | 14 | |
| Diurnal Birds of Prey | | | | | |
| Osprey | | 5 | 6 | 6 | 6 |
| Bald Eagle | 5 | 3 | 2 | 2 | 1 |
| Northern Harrier | | | | | |
| Sharp-shinned Hawk | | | | | |
| Cooper's Hawk | 2 | 1 | 1 | | |
| Northern Goshawk | | | | | |
| Red-shouldered Hawk | | | | | |
| Red-tailed Hawk | 4 | 1 | 5 | 5 | |
| Rough-legged Hawk | | | | | |
| American Kestrel | 2 | | 1 | 2 | 1 |
| Merlin | | | | 1 | |
| Peregrine Falcon | | | | | |

Chart 1. Green Island Species Report

| | Mar 4th/ 5th | Apr 3rd/ 5th | Apr 23rd | May 4th/ 6th | May 20th/ 21st |
|------------------------------|--------------------|--------------------|-------------|--------------------|----------------------|
| Pheasants & Quail | | | | | |
| Ring-necked Pheasant | | | | | |
| Wild Turkey | | | | | 6 |
| California Quail | 1 | 2 | 2 | | 8 |
| Rails & Coots | | | | | |
| Sora | | | | 1 | |
| American Coot | | | | | |
| Shorebirds | | | | | |
| Wilson's Snipe | 3 | 3 | | | |
| Greater Yellowlegs | | | | | |
| Spotted Sandpiper | | | 1 | 1 | 4 |
| Dunlin | | | | | |
| Killdeer | 2 | | 1 | 2 | 5 |
| Gulls & Terns | | | | | |
| Ring-billed Gull | | | | | |
| Glaucous-winged Gull | | | | | |
| Pigeons & Doves | | | | | |
| Rock Dove | | | | | |
| Band-tailed Pigeon | | | | | |
| Mourning Dove | 1 | 2 | 5 | 11 | 9 |
| Owls | | | | | |
| Barn Owl | | | | | |
| Western Screech-Owl | | | | | |
| Great-horned Owl | | | 2 | | |
| Northern Saw-whet Owl | | | | | |
| Swifts | | | | | |
| Vaux's Swift | | | | 150 | 22 |
| Hummingbirds | | | | | |
| Anna's Hummingbird | | | | | |
| Rufous Hummingbird | | | 1 | | |
| Kingfishers | | | | | |
| Belted Kingfisher | 5 | 2 | 1 | 1 | 4 |
| Woodpeckers | | | | | |
| Red-breasted Sapsucker | | | 1 | | |
| Downy Woodpecker | 1 | 7 | 3 | 3 | 1 |
| Hairy Woodpecker | | | | | |
| Northern Flicker | 10 | 8 | 9 | 8 | 4 |
| Pileated Woodpecker | 3 | | | | 2 |
| Flycatchers | | | | | |
| Olive-sided Flycatcher | | | | 1 | |

Chart 1. Green Island Species Report

| | Mar 4th/ 5th | Apr 3rd/ 5th | Apr 23rd | May 4th/ 6th | May 20th/ 21st |
|--------------------------|--------------------|--------------------|-------------|--------------------|----------------------|
| Western Wood-Peevee | | | | 3 | 21 |
| Willow Flycatcher | | | | | 3 |
| Hammond's Flycatcher | | | | | |
| Gray Flycatcher | | | | | |
| Dusky Flycatcher | | | | 1 | |
| Pacific-slope Flycatcher | | | | 1 | |
| Black Phoebe | | | | | |
| Western Kingbird | | | | | |
| Eastern Kingbird | | | | | |
| Crows & Jays | | | | | |
| Steller's Jay | 37 | 22 | 14 | 6 | 6 |
| Western Scrub-Jay | 9 | 5 | 7 | 5 | 8 |
| American Crow | 6 | 11 | 13 | 2 | |
| Raven | 1 | | | | |
| Vireos | | | | | |
| Hutton's Vireo | | | | | |
| Cassin's Vireo | | | | 1 | 1 |
| Warbling Vireo | | | | 11 | 15 |
| Waxwings | | | | | |
| Cedar Waxwing | | | | | 31 |
| Thrushes | | | | | |
| Varied Thrush | | 2 | | | |
| Swainson's Thrush | | | | | 13 |
| Hermit Thrush | 1 | | | | |
| American Robin | 191 | 67 | 31 | 35 | 30 |
| Starlings | | | | | |
| European Starling | 74 | 29 | 6 | 12 | 9 |
| Nuthatches | | | | | |
| Red-breasted Nuthatch | | | | 2 | |
| White-breasted Nuthatch | | | | | |
| Creepers | | | | | |
| Brown Creeper | 3 | 2 | 1 | 1 | |
| Wrens | | | | | |
| Marsh Wren | 1 | | | | |
| Bewick's Wren | 6 | 8 | 10 | 6 | 5 |
| Winter Wren | 2 | | | | |
| House Wren | | | 1 | | |
| Long-tailed Tits | | | | | |
| Bushtit | | | | | |
| Swallows | | | | | |
| Tree Swallow | 5 | 15 | 13 | 10 | 18 |

Chart 1. Green Island Species Report

| | Mar 4th/ 5th | Apr 3rd/ 5th | Apr 23rd | May 4th/ 6th | May 20th/ 21st |
|--|--------------------|--------------------|-------------|--------------------|----------------------|
| Violet-green Swallow | | 150 | | 153 | 3 |
| Northern Rough-winged Swallow | | 3 | 5 | 19 | 6 |
| Cliff Swallow | | | | | 2 |
| Barn Swallow | | 2 | | 5 | 43 |
| Kinglets | | | | | |
| Ruby-crowned Kinglet | 16 | 28 | 15 | | |
| Golden-crowned Kinglet | 2 | 1 | | | |
| Old World Warblers | | | | | |
| Wrentit | | | | | |
| Chickadees & Tits | | | | | |
| Black-capped Chickadee | 22 | 21 | 21 | 20 | 15 |
| Larks | | | | | |
| Horned Lark | | | | | |
| Old World Sparrows | | | | | |
| House Sparrow | | | | | |
| Wagtails & Pipits | | | | | |
| American Pipit | 3 | | | | |
| Siskins, Crossbills & Finches | | | | | |
| Pine Siskin | | | | | |
| American Goldfinch | | 1 | 4 | 42 | 9 |
| Lesser Goldfinch | | | | | |
| Purple Finch | | | | 1 | |
| House Finch | 1 | | | | |
| Evening Grosbeak | | | | | |
| New World Warblers | | | | | |
| Orange-crowned Warbler | | 2 | 10 | 6 | 1 |
| Nashville Warbler | | | 1 | | |
| Yellow Warbler | | | | | 14 |
| Yellow-rumped Warbler | 26 | 12 | 17 | 65 | |
| Black-throated Gray Warbler | | | 2 | 1 | |
| Townsend's Warbler | | | | 3 | |
| Hermit Warbler | | | | 1 | |
| MacGillivray's Warbler | | | | | |
| Common Yellowthroat | | 20 | 51 | 18 | 19 |
| Wilson's Warbler | | | 1 | 17 | 14 |
| Yellow-breasted Chat | | | | | |
| Buntings, Sparrows, Tanagers & Allies | | | | | |
| Fox Sparrow | 2 | 1 | | | |

Chart 1. Green Island Species Report

| | Mar 4th/ 5th | Apr 3rd/ 5th | Apr 23rd | May 4th/ 6th | May 20th/ 21st |
|---------------------------------|--------------------|--------------------|-------------|--------------------|----------------------|
| Song Sparrow | 80 | 57 | 56 | 50 | 54 |
| Lincoln's Sparrow | | 1 | | | |
| White-crowned Sparrow | | | 4 | | |
| White-throated Sparrow | | | | | |
| Golden-crowned Sparrow | | 1 | 11 | 1 | |
| Dark-eyed Junco | 44 | 5 | | | |
| Savannah Sparrow | | 20 | 6 | 2 | 2 |
| Chipping Sparrow | | | | | |
| Brewer's Sparrow | | | | | |
| Vesper Sparrow | | | | | |
| Spotted Towhee | 12 | 15 | 12 | 12 | 22 |
| Western Tanager | | | | | |
| Black-headed Grosbeak | | | | 23 | 42 |
| Lazuli Bunting | | | | | 1 |
| Blackbirds & Orioles | | | | | |
| Bullock's Oriole | | | | 1 | 11 |
| Red-winged Blackbird | 21 | 22 | 24 | 15 | 13 |
| Western Meadowlark | | 1 | | | |
| Brewer's Blackbird | | | | | |
| Brown-headed Cowbird | | 2 | 10 | 27 | 15 |

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 seven species of birds are suspected of breeding at Green Island with 31 confirmed, 20 probable and 6 possible breeders. Osprey returned to their nests on Green Island in early April. One pair has re-built the nest on a power pole near point 6 on the north end of the island. Another pair is using the nest on the BPA tower near point 15 on the north end. This nest was not used last year, though a nearby (and since destroyed) nest was used. On the south end of the island a pair has built a nest on a power pole near point 27, close to where a nest was used last year. Chart II lists the breeding birds of Green Island.

Chart II. Green Island Breeding Birds

| | Confirmed | Probable | Possible |
|--------------------------------------|-----------|----------|----------|
| Grebes | | | |
| Pied-billed Grebe | x | | |
| Ducks, Swans, Geese | | | |
| Canada Goose | x | | |
| Wood Duck | x | | |
| Mallard | x | | |
| Hérons, 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 | |

Chart II. Green Island Breeding Birds

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

Chart II. Green Island Breeding Birds

| | Confirmed | Probable | Possible |
|---|-----------|----------|----------|
| Wilson's Warbler | | | x |
| <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 | 31 | 20 | 6 |

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 144 species. Four new species were added to the list during the spring season.

Sora 5/4
 Dusky Flycatcher 5/4
 Hermit Warbler 5/4
 Wild Turkey 5/20

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

Chart III. Green Island Bird Checklist

Grebes

Pied-billed Grebe

Cormorants

DbI-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

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

