

# **Integrated Monitoring in Bird Conservation Regions (IMBCR) in Idaho**

## **2012 Field Season Summary for Transects Funded by the USFS Region 1 on the Nez Perce National Forest, Idaho**



Nez Perce National Forest on transect number NP-2 – *photo by Jack Stenger*

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## SUMMARY

Between 4 June and 6 July, 2012, Idaho Bird Observatory staff conducted landbird surveys throughout the Nez Perce National Forest as a part of the Integrated Monitoring in Bird Conservation Regions (IMBCR) program coordinated by Rocky Mountain Bird Observatory (RMBO) and partners. We surveyed a total of 104 transects in Idaho in 2012, 65 of which were funded by the US Forest Service Region 1, 24 by the Great Northern Landscape Conservation Cooperative (GNLCC), and 15 by the Bureau of Land Management (BLM). Here we provide an overview of the 18 transects on the Nez Perce National Forest funded by the USFS Region 1.

The purpose of this document is to provide collaborating groups with an overview of completed work and birds recorded. None of the data in this report should be considered final or published. During the winter we will work with Rocky Mountain Bird Observatory and other partners to prepare a report based on 2012 data that will include density and occupancy estimates for species throughout the range of the IMBCR program. A detailed, final report containing this information will be made available during March 2013; the 2011 report (White et al. 2012) is available at: [http://www.rmbo.org/v3/Portals/0/Documents/Science/Reports/2011\\_IMBCR\\_report.pdf](http://www.rmbo.org/v3/Portals/0/Documents/Science/Reports/2011_IMBCR_report.pdf).

## PROTOCOL and SURVEY EFFORT

Transects are randomly selected and spatially balanced throughout each stratum. Transects on the Nez Perce NF were stratified into two categories:

- **NP** – USFS Region 1 lands in the Nez Perce National Forest with relatively good road access (i.e., roads within ~2 miles - “frontcountry”)
  - 15 transects
- **NR** – USFS Region 1 “roadless” lands in the Nez Perce National Forest, “backcountry”
  - 3 transects

All National Forest land in USFS Region 1 is sub-stratified into front-country and backcountry (roadless) areas and is surveyed on an approximate 4:1 ratio of front-country to backcountry. See Figure 1 for transects surveyed in 2012.

Each transect is a square grid of 16 points separated by 250 meters. Due to terrain, weather and other factors it is often difficult to complete all 16 point during the morning survey window. To be considered a completed transect, we must complete at least 6 point counts on each transect (transects dominated by private land reduce the minimum to 4). Each point count lasts 6 minutes and surveyors record each bird detected, how it was detected, its radial distance from the observer, and the minute of the survey in which it is first detected.

Each transect has a shorthand name for quick reference. For example, ID-BCR10-NP2 is shorthand for Idaho; Bird Conservation Region 10; Nez Perce National Forest Frontcountry; priority transect 2. For a detailed protocol please see last year’s report (White et al. 2012).

## **BIRD DATA**

We detected 2,262 individuals of 69 bird species during surveys on Nez Perce National Forest transects (Table 1). Swainson's Thrush, Townsend's Warbler, Dark-eyed Junco, Yellow-rumped Warbler and Red-breasted Nuthatch were the five most frequently-detected species across all transects (Table 1). The five most frequent species on the **NP** transects were Townsend's Warbler, Swainson's Thrush, Yellow-rumped Warbler, Red-breasted Nuthatch and Dark-eyed Junco (Table 2a). For **NR** transects, the five most frequent species were Varied Thrush, Dark-eyed Junco, Red Crossbill, Ruby-crowned Kinglet and Hermit Thrush (Table 2b).

## **REFERENCES**

White, C. M., N. J. Van Lanen, D.C. Pavlacky Jr., J. A. Blakesley, R. A. Sparks, J. A. Rehm-Lorber, M. F. McLaren, J. J. Birek and D. J. Hanni. 2012. Integrated Monitoring in Bird Conservation Regions (IMBCR): 2011 Annual Report. Rocky Mountain Bird Observatory. Brighton, Colorado, USA.

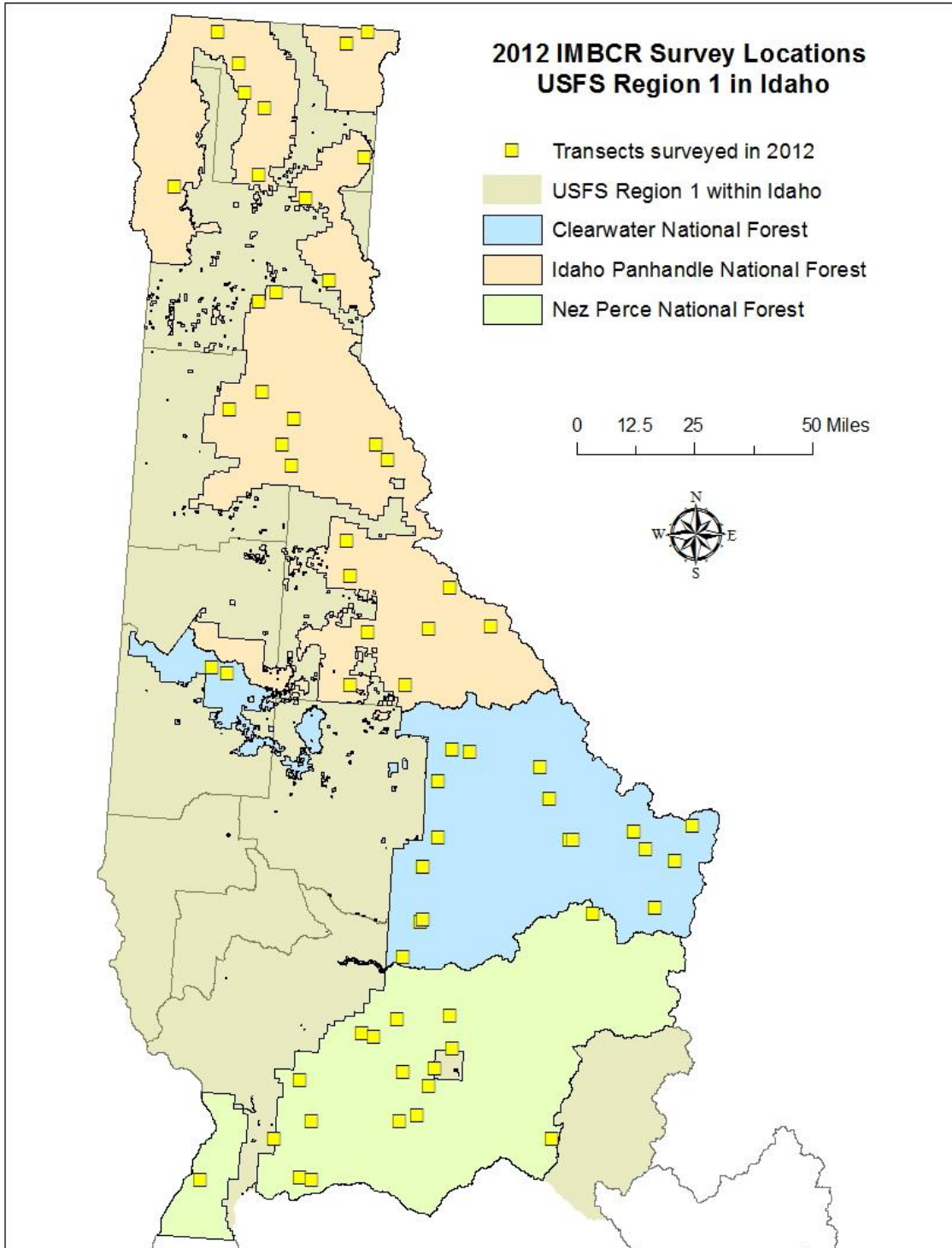
## **ACKNOWLEDGMENTS**

We thank the USFS Region 1 and the Nez Perce National Forest for funding support and we thank collaborators in Montana (Catherine Wightman, Beth Hahn, and Josh Vest) for their ideas and help. Thanks to Rocky Mountain Bird Observatory for support and advice in implementing IMBCR surveys and to Kristina Smucker and the Avian Science Center for help with pre-season training. We are also very grateful to Audrey Adams, Jacob Cooper, Michael Fuss, and Aaron Spidal for conducting the bird surveys and to Liz Urban for pre-season planning assistance.



Burned forest on the Nez Perce National Forest – *photo by Jack Stenger*

**Figure 1.** Survey locations in the USFS Region 1, including the Nez Perce NF, as part of the IMBCR program in 2012.



**Table 1.** Total number of detections for each species detected during point count surveys on the Nez Perce NF in Idaho as part of the IMBCR program in 2012.

<b>Species</b>	<b>Number</b>	<b>Species</b>	<b>Number</b>
American Robin	73	Osprey	1
American Three-toed Woodpecker	7	Pacific Wren	53
Black-capped Chickadee	12	Pileated Woodpecker	19
Black-headed Grosbeak	18	Pine Grosbeak	17
Brown Creeper	28	Pine Siskin	51
Calliope Hummingbird	5	Red Crossbill	82
Canada Goose	1	Red-breasted Nuthatch	144
Canyon Wren	1	Red-eyed Vireo	1
Cassin's Finch	7	Red-naped Sapsucker	22
Cassin's Vireo	23	Red-tailed Hawk	5
Cedar Waxwing	3	Rock Wren	1
Chestnut-backed Chickadee	25	Ruby-crowned Kinglet	54
Chipping Sparrow	75	Ruffed Grouse	19
Clark's Nutcracker	8	Song Sparrow	2
Common Nighthawk	1	Spotted Towhee	12
Common Raven	25	Spruce Grouse	2
Cooper's Hawk	2	Steller's Jay	13
Dark-eyed Junco	157	Swainson's Hawk	2
Dusky Flycatcher	21	Swainson's Thrush	180
Dusky Grouse	1	Townsend's Solitaire	21
Fox Sparrow	27	Townsend's Warbler	179
Golden-crowned Kinglet	70	Unknown Bird	20
Gray Jay	23	Unknown Flycatcher	4
Hairy Woodpecker	18	Unknown Hummingbird	4
Hammond's Flycatcher	20	Unknown Swallow	1
Hermit Thrush	56	Unknown Woodpecker	20
House Finch	1	Varied Thrush	114
House Wren	1	Warbling Vireo	34
Lazuli Bunting	13	Western Bluebird	3
Lincoln's Sparrow	6	Western Flycatcher	4
MacGillivray's Warbler	53	Western Tanager	111
Mountain Bluebird	2	Western Wood-Pewee	6
Mountain Chickadee	45	Williamson's Sapsucker	2
Nashville Warbler	11	Wilson's Warbler	10
Northern Flicker	32	Yellow Warbler	6
Northern Pygmy-Owl	1	Yellow-rumped Warbler	153
Olive-sided Flycatcher	4	<b>Grand Total</b>	<b>2,262</b>
Orange-crowned Warbler	14		

**Table 2a.** Number of detections per point, and total per transect, for each of the NP transects in 2012.

Species	Average Detections/Point by Species (per transect)															Total # detections per species - all NP transects	Average species detection - all NP points
	NP1	NP2	NP3	NP4	NP5	NP6	NP7	NP8	NP9	NP10	NP11	NP12	NP13	NP14	NP15		
<i># of points</i>	9	6	9	13	11	15	16	8	15	13	6	8	14	9	7	Total: 159	Avg: 10.60
American Robin	0.11	0.00	0.22	0.31	0.73	0.13	0.13	0.25	0.00	0.31	0.83	0.13	0.86	1.22	1.29	63	0.40
American Three-toed Woodpecker	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Black-capped Chickadee	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.13	0.00	0.08	0.17	0.00	0.14	0.44	0.00	12	0.08
Black-headed Grosbeak	1.22	0.00	0.33	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	18	0.11
Brown Creeper	0.00	0.17	0.22	0.00	0.00	0.13	0.06	0.00	0.07	0.54	0.00	0.00	0.00	0.11	0.14	16	0.10
Calliope Hummingbird	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5	0.03
Canada Goose	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Canyon Wren	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Cassin's Finch	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.01
Cassin's Vireo	0.00	0.00	0.00	0.00	0.18	0.27	0.00	0.63	0.00	0.08	0.17	0.63	0.21	0.22	0.00	23	0.14
Cedar Waxwing	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	0.02
Chestnut-backed Chickadee	0.00	0.33	0.33	0.54	0.00	0.00	0.13	0.00	0.00	0.15	0.17	0.00	0.00	0.33	0.71	25	0.16
Chipping Sparrow	0.33	0.00	0.56	0.46	0.73	0.47	0.13	0.00	0.00	0.38	0.00	0.13	0.64	0.00	0.14	47	0.30
Clark's Nutcracker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
Common Nighthawk	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Common Raven	0.00	0.00	0.11	0.08	0.64	0.20	0.00	0.00	0.13	0.15	0.67	0.00	0.07	0.00	0.00	21	0.13
Cooper's Hawk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	1	0.01
Dark-eyed Junco	0.44	0.17	1.22	0.77	0.36	0.67	0.31	0.25	1.00	0.69	1.33	0.00	1.14	1.00	2.00	118	0.74
Dusky Flycatcher	0.22	0.00	0.00	0.15	0.73	0.00	0.00	0.13	0.00	0.00	0.50	0.00	0.14	0.00	0.00	18	0.11
Dusky Grouse	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Fox Sparrow	0.00	0.00	0.78	0.46	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	14	0.09

Species	Average Detections/Point by Species (per transect)															Total # detections per species - all NP transects	Average species detection - all NP points
	NP1	NP2	NP3	NP4	NP5	NP6	NP7	NP8	NP9	NP10	NP11	NP12	NP13	NP14	NP15		
Golden-crowned Kinglet	0.00	1.00	0.44	0.69	0.00	0.40	0.50	0.50	0.20	0.31	0.17	0.25	0.21	0.33	0.43	56	0.35
Gray Jay	0.00	0.00	0.22	0.00	0.00	0.13	0.00	0.00	0.33	0.46	0.33	0.00	0.14	0.00	0.00	19	0.12
Hairy Woodpecker	0.11	0.00	0.11	0.00	0.09	0.07	0.00	0.00	0.33	0.15	0.33	0.25	0.00	0.11	0.00	16	0.10
Hammond's Flycatcher	0.22	0.00	0.00	0.08	0.45	0.20	0.06	0.25	0.07	0.00	0.00	0.38	0.00	0.11	0.00	19	0.12
Hermit Thrush	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.60	0.00	0.00	0.00	1.14	0.00	0.00	27	0.17
House Finch	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	1	0.01
House Wren	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Lazuli Bunting	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12	0.08
Lincoln's Sparrow	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.01
MacGillivray's Warbler	1.11	0.00	0.11	0.31	1.27	0.00	0.00	0.00	0.27	0.00	0.67	0.75	0.14	0.33	0.43	51	0.32
Mountain Bluebird	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	1	0.01
Mountain Chickadee	0.89	0.00	0.11	0.00	0.18	0.73	0.13	0.13	0.07	0.46	0.00	0.00	0.21	0.00	0.00	35	0.22
Nashville Warbler	0.11	0.00	0.00	0.00	0.36	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8	0.05
Northern Flicker	0.33	0.00	0.11	0.00	0.36	0.67	0.00	0.13	0.13	0.23	0.00	0.38	0.21	0.11	0.14	32	0.20
Northern Pygmy-Owl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	1	0.01
Olive-sided Flycatcher	0.22	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	0.03
Orange-crowned Warbler	0.78	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	13	0.08
Osprey	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	1	0.01
Pacific Wren	0.44	0.50	0.67	0.54	0.18	0.13	0.31	0.00	0.13	0.15	0.33	1.13	0.00	0.11	0.14	46	0.29
Pileated Woodpecker	0.00	0.17	0.22	0.08	0.00	0.07	0.06	0.13	0.07	0.08	0.33	0.38	0.21	0.00	0.29	19	0.12
Pine Grosbeak	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	4	0.03
Pine Siskin	0.00	0.00	0.00	0.15	0.00	0.93	0.00	0.13	0.13	0.46	0.00	0.13	0.64	0.00	0.14	36	0.23
Red Crossbill	0.00	0.00	0.44	0.15	0.27	0.47	0.63	0.00	0.20	0.00	0.50	0.63	0.36	0.00	0.43	45	0.28
Red-breasted Nuthatch	0.56	0.33	1.22	0.85	1.45	0.60	0.50	0.63	0.93	0.92	0.67	0.88	0.86	0.78	0.71	128	0.81
Red-eyed Vireo	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01

Species	Average Detections/Point by Species (per transect)															Total # detections per species - all NP transects	Average species detection - all NP points
	NP1	NP2	NP3	NP4	NP5	NP6	NP7	NP8	NP9	NP10	NP11	NP12	NP13	NP14	NP15		
Red-naped Sapsucker	0.00	0.00	0.33	0.38	0.09	0.07	0.00	0.00	0.00	0.38	0.50	0.00	0.00	0.11	0.29	21	0.13
Red-tailed Hawk	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.14	4	0.03
Rock Wren	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Ruby-crowned Kinglet	0.00	0.00	0.78	0.00	0.00	0.27	0.06	0.00	0.00	0.00	0.00	0.13	0.36	0.00	0.00	18	0.11
Ruffed Grouse	0.11	0.00	0.00	0.38	0.09	0.00	0.06	0.00	0.00	0.15	0.00	0.25	0.00	0.33	0.57	19	0.12
Song Sparrow	0.11	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.01
Spotted Towhee	1.22	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12	0.08
Spruce Grouse	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
Steller's Jay	0.22	0.00	0.11	0.08	0.09	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.11	0.14	13	0.08
Swainson's Hawk	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	0.01
Swainson's Thrush	0.00	1.33	1.33	1.85	0.09	1.80	0.81	1.63	1.07	2.08	1.00	0.50	0.50	1.00	0.29	169	1.06
Townsend's Solitaire	0.00	0.00	0.11	0.23	0.09	0.13	0.06	0.00	0.13	0.08	0.00	0.13	0.14	0.22	0.29	18	0.11
Townsend's Warbler	0.00	1.00	0.78	1.92	0.64	0.80	1.25	2.00	0.67	1.77	2.00	0.13	0.50	2.67	1.14	178	1.12
Unknown Bird	0.22	0.17	0.00	0.00	0.18	0.40	0.00	0.00	0.07	0.00	0.00	0.00	0.14	0.11	0.00	15	0.09
Unknown Flycatcher	0.00	0.00	0.00	0.00	0.00	0.20	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	0.03
Unknown Hummingbird	0.11	0.00	0.00	0.00	0.09	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	0.02
Unknown Swallow	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	0.01
Unknown Woodpecker	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.38	0.40	0.23	0.00	0.00	0.07	0.00	0.00	20	0.13
Varied Thrush	0.00	1.00	0.67	0.77	0.00	0.13	1.06	0.00	0.00	0.62	0.00	0.00	0.14	0.44	1.14	63	0.40
Warbling Vireo	0.00	0.00	0.22	0.46	0.18	0.00	0.00	0.00	0.53	0.00	0.33	0.25	0.50	0.22	0.14	32	0.20
Western Bluebird	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.00	3	0.02
Western Flycatcher	0.00	0.00	0.11	0.00	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	0.02
Western Tanager	0.78	0.00	0.78	0.85	1.18	0.20	0.44	1.00	0.87	0.38	0.83	1.38	0.21	0.89	0.57	105	0.66
Western Wood-Pewee	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	6	0.04
Williamson's Sapsucker	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	2	0.01



Species	Average Detections/Point by Species (per transect)															Total # detections per species - all NP transects	Average species detection - all NP points
	NP1	NP2	NP3	NP4	NP5	NP6	NP7	NP8	NP9	NP10	NP11	NP12	NP13	NP14	NP15		
Wilson's Warbler	0.00	0.00	0.11	0.46	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	9	0.06
Yellow Warbler	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	6	0.04
Yellow-rumped Warbler	0.00	0.17	1.56	0.62	0.82	0.67	0.56	0.25	0.73	1.00	1.17	1.00	1.21	1.33	1.86	134	0.84
<b>Total birds per transect</b>	<b>108</b>	<b>41</b>	<b>132</b>	<b>184</b>	<b>143</b>	<b>179</b>	<b>121</b>	<b>73</b>	<b>143</b>	<b>164</b>	<b>78</b>	<b>92</b>	<b>160</b>	<b>119</b>	<b>95</b>	<b>1,832</b>	
<b>Average birds per point</b>	<b>12.00</b>	<b>6.83</b>	<b>14.67</b>	<b>14.15</b>	<b>13.00</b>	<b>11.93</b>	<b>7.56</b>	<b>9.13</b>	<b>9.53</b>	<b>12.62</b>	<b>13.00</b>	<b>11.50</b>	<b>11.43</b>	<b>13.22</b>	<b>13.57</b>		<b>11.52</b>

**Table 2b.** Number of detections per point, and total per transect, for each of the NR transects in 2012.

Species	Average Detections/Point by Species (per transect)			Total # detections per species - all transects	Average species detection - all NR points
	NR1	NR2	NR3		
<i># of points</i>	<i>14</i>	<i>11</i>	<i>16</i>	<i>Total: 41</i>	<i>Avg: 13.67</i>
American Robin	0.07	0.55	0.19	10	0.24
American Three-toed Woodpecker	0.00	0.18	0.25	6	0.15
Brown Creeper	0.00	0.36	0.50	12	0.29
Cassin's Finch	0.36	0.00	0.00	5	0.12
Chipping Sparrow	1.36	0.64	0.13	28	0.68
Clark's Nutcracker	0.36	0.09	0.13	8	0.20
Common Raven	0.07	0.09	0.13	4	0.10
Cooper's Hawk	0.00	0.09	0.00	1	0.02
Dark-eyed Junco	0.93	0.91	1.00	39	0.95
Dusky Flycatcher	0.00	0.27	0.00	3	0.07
Fox Sparrow	0.71	0.09	0.13	13	0.32
Golden-crowned Kinglet	0.21	0.55	0.31	14	0.34
Gray Jay	0.07	0.00	0.19	4	0.10
Hairy Woodpecker	0.00	0.09	0.06	2	0.05
Hammond's Flycatcher	0.00	0.09	0.00	1	0.02
Hermit Thrush	0.43	0.55	1.06	29	0.71
Lazuli Bunting	0.00	0.09	0.00	1	0.02
Lincoln's Sparrow	0.00	0.00	0.25	4	0.10
MacGillivray's Warbler	0.00	0.18	0.00	2	0.05
Mountain Bluebird	0.00	0.09	0.00	1	0.02
Mountain Chickadee	0.21	0.45	0.13	10	0.24
Nashville Warbler	0.07	0.18	0.00	3	0.07
Orange-crowned Warbler	0.00	0.09	0.00	1	0.02
Pacific Wren	0.00	0.55	0.06	7	0.17
Pine Grosbeak	0.43	0.00	0.44	13	0.32
Pine Siskin	0.50	0.64	0.06	15	0.37
Red Crossbill	0.29	0.18	1.94	37	0.90
Red-breasted Nuthatch	0.43	0.55	0.25	16	0.39
Red-naped Sapsucker	0.00	0.09	0.00	1	0.02
Red-tailed Hawk	0.00	0.00	0.06	1	0.02
Rock Wren	0.00	0.00	0.00	0	0.00
Ruby-crowned Kinglet	1.36	0.00	1.06	36	0.88
Spruce Grouse	0.00	0.00	0.13	2	0.05
Swainson's Thrush	0.00	0.27	0.50	11	0.27

Species	Average Detections/Point by Species (per transect)			Total # detections per species - all transects	Average species detection - all NR points
	NR1	NR2	NR3		
Townsend's Solitaire	0.00	0.18	0.06	3	0.07
Townsend's Warbler	0.00	0.00	0.06	1	0.02
Unknown Bird	0.14	0.27	0.00	5	0.12
Unknown Hummingbird	0.07	0.00	0.00	1	0.02
Varied Thrush	1.64	0.00	1.75	51	1.24
Warbling Vireo	0.00	0.09	0.06	2	0.05
Western Flycatcher	0.00	0.09	0.00	1	0.02
Western Tanager	0.00	0.45	0.06	6	0.15
Wilson's Warbler	0.00	0.09	0.00	1	0.02
Yellow-rumped Warbler	0.21	0.64	0.56	19	0.46
<b>Total birds per transect</b>	<b>139</b>	<b>107</b>	<b>184</b>	<b>430</b>	
<b>Average birds per point</b>	<b>9.93</b>	<b>9.73</b>	<b>11.50</b>		<b>10.49</b>