

Klamath Bird Observatory Spring Point Counts and Fall Area Searches: 2011 Summary Report

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Cover photograph: Lazuli Buntings were the most frequently detected bird during point count surveys in 2011. Photo copyright Jim Livaudais.



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2011 Summary Report**

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Introduction

In 2011, the Klamath Bird Observatory (KBO) continued implementing bird and habitat monitoring projects in the Klamath Siskiyou Bioregion of southern Oregon and northern California. These Oregon-Washington and California Partners in Flight (PIF) projects are part of the Klamath Bird Monitoring Network which is coordinated by KBO and the US Forest Service Pacific Southwest Research Station (PSW) Arcata (formerly Redwood Sciences Laboratory) (Alexander et al. 2004). As part of this Network we implement baseline inventories to fill information gaps about the distribution of birds, applied research projects to address natural resource management challenges using birds as ecological indicators, and long-term monitoring efforts to track bird population trends and demographics. This report summarizes related point count and area search survey efforts implemented in 2011 by KBO. Our demographic monitoring at constant effort mist netting stations and aquatic bird monitoring are documented in separate reports (Frey et al. *In Prep*, Hussey et al. *In Prep*).

The objectives of our point count and area search program are to: (1) track landbird population trends at a regional scale; (2) study bird and habitat relationships to better understand the ecological effects of land management and restoration; and (3) use results to inform priority land management issues, including the restoration of oak, riparian, and meadow habitats.

During the spring breeding season, KBO surveyed 212 routes including 1,911 stations during 271 visits, for a total of 2,401 point count surveys completed in 2011 (Table 1). In addition, during post-breeding dispersal and fall migration, KBO surveyed 18 routes on 91 survey days, completing 118 fall area search surveys (Table 2).

Bird and Habitat Surveys

Standard point count and area search survey methodologies were used during breeding and dispersal/migration seasons respectively, and standard vegetation monitoring techniques were followed (Ralph et al. 1993, Stephens 2010). Point count surveys employed variable circular plot distance sampling. In conjunction with select point count surveys completed on moving water, standard float surveys were also implemented. Area search surveys were completed at some of the same locations as point count surveys following a 20-minute fixed radius methodology. Habitat surveys were conducted using a rel  ve methodology (Ralph et al. 1993, Stephens 2010) at all survey locations.

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Long-term Monitoring

KBO continued long-term monitoring efforts to track population trends. Point count survey locations were revisited at 6 constant effort monitoring stations (CES) on the eastside of the Cascade Range and 5 CES on the westside of the Cascade Range (Table 1). Ten of these CES sites have been visited for more than 10 years. Long-term monitoring surveys at CES sites also included area searches that are summarized in a separate report (Frey et al. *In Prep*). Two point count routes in the Upper Klamath Basin were re-surveyed; these routes have also been visited for more than 10 years. In 2011 a fourth year of a long-term monitoring project in association with the National Park Service Klamath Network Inventory and Monitoring Program was implemented (Stephens et al. 2010). This program involves visiting each park once every three years. The second round of point count surveys were completed at two of six Network parks in 2011. We visited 25 routes at Lava Beds National Monument and 30 routes at Redwood National and State Parks (Table 1).

Restoration

In 2011 applied research studies were implemented to monitor the effects of restoration and gather baseline data to inform restoration planning. Surveys were conducted at restoration sites within riparian, meadow, and oak woodland habitats.

KBO completed a second year of monitoring the effect of dam removal on the Rogue River in cooperation with the Rogue Valley Council of Governments. This project was set up to assess ecological changes in the aquatic/upland interface that result from the removal of the Gold Ray Dam using a before and after treatment design. In 2011, the first year post dam removal surveys were completed along six point count and four float survey routes (Table 1). Previous surveys were completed in 2010 prior to dam removal.

In 2011 KBO began monitoring riparian landbirds as part of the Trinity River Restoration Project in northern California. KBO is continuing the bird monitoring work originally initiated in 2002 by the PSW Arcata. A major component of this Bureau of Reclamation restoration project involves constructing riparian habitat to benefit both fish and riparian bird species. KBO completed spring and fall surveys at sites located along the Trinity River's main stem and at specific restoration sites. Spring point counts were conducted at 34 routes and dispersal/migration area search surveys were conducted at 14 routes (Table 1, Table 2).

KBO completed a second year of monitoring the restoration of Fourmile Meadow in partnership with the Fremont-Winema National Forest, U.S. Fish and Wildlife Service (USFWS) Partners for Fish and Wildlife Program, and private landowners. Using a before and after treatment design, this project was set up to assess ecological changes that result from breaching an irrigation ditch and the resulting longer seasonal flooding of the meadow. In 2011 the first year of post restoration monitoring was completed. Spring point count and fall area search surveys were completed along four routes (Table 1, Table 2). Previous surveys were completed prior to restoration in 2010.

In spring of 2011, KBO completed a one year study to provide baseline data on bird communities across a gradient of oak forest types throughout southern Oregon, meeting

pressing information needs about oak woodland restoration. This project was implemented as part of the American Bird Conservancy's *Quercus* and Aves Neotropical Migratory Bird Conservation Act Project in collaboration with Oregon State University, USFWS Partners for Fish and Wildlife Program, and Lomakatsi Restoration Project. Point count surveys were conducted on both private and public lands in a variety of oak habitats ranging from oak savannas to mixed hardwood/conifer forests. Seventy-one routes were visited once each in the Rogue Valley and 12 routes were visited three times each in the Umpqua Valley (Table 1). Additionally, we revisited 15 routes previously surveyed at Bureau of Land Management Medford District fuel treatment sites (Alexander et al. 2007, Seavy et al. 2008), and we continued monitoring along two routes at an oak restoration site in the Upper Klamath Basin (Table 1).

Conclusion

In 2011 the Klamath Bird Observatory continued working with our partners to maintain our Oregon-Washington and California Partners in Flight applied research and long-term monitoring program. These efforts meet monitoring objectives identified by the North American Bird Conservation Initiative and Partners in Flight (Hussell and Ralph 1998, NABCI 2007). As part of the Klamath Bird Monitoring Network, these efforts, coupled with KBO's long-term demographic monitoring and aquatic bird monitoring, and efforts implemented by PSW Arcata and many additional partners, represents one of the most comprehensive regional bird monitoring programs in the world (Alexander 2004).

Acknowledgements

Our 2011 effort represents an extensive partnership involving many cooperators including: American Bird Conservancy; Ashland School District; Bureau of Land Management Oregon State Office and Medford, Lakeview, and Roseburg Districts; Bureau of Reclamation; City of Ashland Parks and Recreation; City of Medford Parks and Recreation; Douglas and Jackson County Parks; Lomakatsi Restoration Project; Mad River Biologists; National Oceanic and Atmospheric Administration Open Rivers Initiative; National Park Service Klamath Network, Lava Beds National Monument, Redwood National and State Parks, and Oregon Caves National Monument; Oregon State University; Oregon Watershed Enhancement Board; Rogue Valley Council of Governments; The Nature Conservancy; Trinity River Restoration Program; U.S. Fish and Wildlife Service (USFWS) and USFWS Partners for Fish and Wildlife Program; U.S. Forest Service Fremont-Winema, Klamath, and Rogue-River Siskiyou National Forests; numerous private landowners; and others. We are grateful to KBO Research Biologists, Ian Ausprey and Felicity Newell, who made this season successful. We would like to acknowledge the independent contractors that completed spring and fall surveys for KBO: Jim DeStaebler, Rob Fowler, Dave Haupt, Frank Lospalluto, Brian O'Donnell, Kevin Sands, Dave Spangenburg, and Kevin Spencer. We would also like to acknowledge KBO intern and current graduate student at Oregon State University, Kate Halstead, who completed study design and surveys on the oak restoration project.

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Table 1. KBO point count and vegetation survey effort during spring of 2011 [Stations = number of stations surveyed during spring visits; Visits = number of site visits during spring; Surveys = Total number of surveys during spring].

Project	Site Code	Site Name	Stations	Visits	Surveys
Long-term Monitoring					
Mist Netting Sites:	7MIL	Seven Mile	3	1	3
Eastside Cascade	CABN	Cabin	4	1	4
Range	JOHN	Johnson Creek	5	1	5
	ODES	Odessa Creek	4	1	4
	TOPS	Topsy	4	1	4
	WOOD	Wood River	4	1	4
Subtotal			24	6	24
Mist Netting Sites:	ANT1	Antelope Creek	3	1	3
Westside Cascade	ASWA	Ashland Watershed	2	1	2
Range	ORCA	Oregon Caves	2	1	2
	WIIM	Wildlife Images	6	1	6
	WIWI	Willow Wind	4	1	4
Subtotal			17	5	17
Upper Klamath	CHICKB	Chicken Hill B	15	1	15
	CHICKC	Chicken Hill C	25	1	25
Subtotal			40	2	40
National Park Service	LB01	Lava Beds 01	12	1	12
Klamath Network	LB02	Lava Beds 02	12	1	12
	LB03	Lava Beds 03	12	1	12
	LB04	Lava Beds 04	12	1	12
	LB05	Lava Beds 05	12	1	12
	LB06	Lava Beds 06	12	1	12
	LB07	Lava Beds 07	12	1	12
	LB08	Lava Beds 08	12	1	12
	LB09	Lava Beds 09	12	1	12
	LB10	Lava Beds 10	12	1	12
	LB11	Lava Beds 11	12	1	12
	LB12	Lava Beds 12	12	1	12
	LB13	Lava Beds 13	12	1	12
	LB14	Lava Beds 14	12	1	12
	LB15	Lava Beds 15	12	1	12
	LB16	Lava Beds 16	12	1	12
	LB17	Lava Beds 17	12	1	12
	LB18	Lava Beds 18	12	1	12
	LB19	Lava Beds 19	12	1	12
	LB20	Lava Beds 20	12	1	12
	LB21	Lava Beds 21	12	1	12
	LB22	Lava Beds 22	12	1	12
	LB23	Lava Beds 23	12	1	12
	LB24	Lava Beds 24	12	1	12

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Project	Site Code	Site Name	Stations	Visits	Surveys
National Park Service	LB25	Lava Beds 25	12	1	12
Klamath Network	RW01	Redwoods 01	6	1	6
<i>continued</i>	RW02	Redwoods 02 ¹	6	1	6
	RW03	Redwoods 03	6	1	6
	RW04	Redwoods 04	8	1	8
	RW05	Redwoods 05	6	1	6
	RW06	Redwoods 06	6	1	6
	RW07	Redwoods 07	6	1	6
	RW08	Redwoods 08	6	1	6
	RW09	Redwoods 09	6	1	6
	RW10	Redwoods 10	6	1	6
	RW11	Redwoods 11	6	1	6
	RW12	Redwoods 12	7	1	7
	RW13	Redwoods 13	8	1	8
	RW14	Redwoods 14	6	1	6
	RW15	Redwoods 15	6	1	6
	RW16	Redwoods 16	7	1	7
	RW17	Redwoods 17	8	1	8
	RW18	Redwoods 18	6	1	6
	RW19	Redwoods 19	6	1	6
	RW20	Redwoods 20	6	1	6
	RW21	Redwoods 21	9	1	9
	RW22	Redwoods 22	6	1	6
	RW23	Redwoods 23	6	1	6
	RW24	Redwoods 24	8	1	8
	RW25	Redwoods 25	6	1	6
	RW26	Redwoods 26	6	1	6
	RW27	Redwoods 27	6	1	6
	RW28	Redwoods 28	8	1	8
	RW29	Redwoods 29	6	1	6
	RW30	Redwoods 30	6	1	6
Subtotal			495	55	495
Restoration					
Gold Ray Dam	DOBR	Dodge Bridge	11	2	22
	KESL	Kelly Slough	6	2	12
	KESN	Kelly Slough North	10	2	20
	KESS	Kelly Slough South	11	2	22
	UPK1	Upstream Kelly Slough 1	12	2	24
	UPK2	Upstream Kelly Slough 2	8	2	16
Subtotal			58	12	116
Trinity River	01L	Reach_01_Left	10	1-3	24
	01R	Reach_01_Right	10	1-3	19
	02L	Reach_02_Left	4	1	4
	02R	Reach_02_Right	8	1	8
	03L	Reach_03_Left	5	3	15
	03R	Reach_03_Right	9	1-3	19

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Project	Site Code	Site Name	Stations	Visits	Surveys
Trinity River <i>continued</i>	04L	Reach_04_Left	4	1	4
	04R	Reach_04_Right	6	1	6
	05L	Reach_05_Left	10	1	10
	05R	Reach_05_Right	10	1	10
	06L	Reach_06_Left	20	1	20
	06R	Reach_06_Right	20	1-3	51
	07R	Reach_07_Right	8	1	8
	08R	Reach_08_Right	10	1	10
	09R	Reach_09_Right	10	1	10
	10R	Reach_10_Right	4	1	4
	11L	Reach_11_Left	9	1	9
	11R	Reach_11_Right	9	1	9
	12L	Reach_12_Left	10	1	10
	12R	Reach_12_Right	3	1	3
	13R	Reach_13_Right	10	1	10
	14R	Reach_14_Right	8	1	8
	15L	Reach_15_Left	10	3	30
	15R	Reach_15_Right	22	1-3	53
	16L	Reach_16_Left	6	1	6
	16R	Reach_16_Right	9	1-3	23
	A	Lewiston_A	1	1	1
	COCR	Conner_Creek_ESL	1	2	2
	DARL	Dark_Gulch_ESL_Left	2	3	6
	DARR	Dark_Gulch_ESL_Right	2	2-3	5
	ELKH	Elkhorn_ESL	1	1	1
	HOFL	Hocker_Flat_ESL	8	3	24
	VAGU	Valdor_Gulch_ESL	9	3	27
	ZZ	Lewiston_ZZ	2	3	6
Subtotal			270	61 ²	455
Fourmile Meadow	FMME	Fourmile Meadow East	11	1	11
	FMMW	Fourmile Meadow West	11	1	11
	WMNO	Wright's Meadow North	14	1	14
	WMSO	Wright's Meadow South	13	1	13
Subtotal			49	4	49
Oaks: Rogue Valley	ADRD	Adams Road	7	1	7
	AFR1	Ashland Forest Resiliency 1	9	1	9
	AND1	Anderson Creek 1	10	1	10
	AND2	Anderson Creek 2	3	1	3
	ASC2	Althouse / Sucker Creek 2	10	1	10
	BICR	Bishop's Creek	8	1	8
	BUCR	Bummer Creek	12	1	12
	CAH1	Cathedral Hills 1	12	1	12
	CAH2	Cathedral Hills 2	10	1	10
	CANY	Canyon Creek	12	1	12
	CHC1	China Creek 1	11	1	11
	CRAS	Cascade Ranch South	14	1	14
	CRAW	Cascade Ranch West	12	1	12

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Project	Site Code	Site Name	Stations	Visits	Surveys
Oaks:	CRE1	Cascade Ranch East 1	8	1	8
Rogue Valley	CRE2	Cascade Ranch East 2	8	1	8
<i>continued</i>	CRE3	Cascade Ranch East 3	12	1	12
	CROW	Crowfoot Creek	13	1	13
	EMI1	Emigrant Lake 1	10	1	10
	EMI2	Emigrant Lake 2	7	1	7
	GON1	Gold Nugget 1	12	1	12
	GRS1	Green Springs 1	11	1	11
	GRS2	Green Springs 2	10	1	10
	HIG1	Hinkle Gulch 1	8	1	8
	HIG2	Hinkle Gulch 2	12	1	12
	HIG3	Hinkle Gulch 3	12	1	12
	IMLT	Indian Memorial Land Trust	5	1	5
	INC1	Indian Creek 1	12	1	12
	INC2	Indian Creek 2	12	1	12
	JAW	Jackson Wellsprings	2	1	2
	KACR	Kanutchan Creek	13	1	13
	KHCR	Khoerry Creek	8	1	8
	LCE1	Lost Creek Lake East 1	12	1	12
	LCE2	Lost Creek Lake East 2	12	1	12
	LCE3	Lost Creek Lake East 3	12	1	12
	LCW1	Lost Creek Lake West 1	10	1	10
	LCW2	Lost Creek Lake West 2	12	1	12
	LCW3	Lost Creek Lake West 3	12	1	12
	LCW4	Lost Creek Lake West 4	12	1	12
	LOT1	Lower Table Rock 1	5	1	5
	LOT2	Lower Table Rock 2	9	1	9
	NMC3	Ninemile Creek 3	11	1	11
	PIJE	Pilot Joe East	11	1	11
	PIJS	Pilot Joe South	10	1	10
	PIJW	Pilot Joe West	8	1	8
	POCR	Poormans Creek	11	1	11
	PRPA	Prescott Park	14	1	14
	PSNO	Penny Stew North	10	1	10
	PSSO	Penny Stew South	12	1	12
	REE1	Reese Creek 1	12	1	12
	REE2	Reese Creek 2	15	1	15
	SHC1	Shanty Creek 1	10	1	10
	SIFI	Siskiyou Fire	10	1	10
	SIMP	Siskiyou Mountain Park	7	1	7
	SS2A	South Stew-Griffin Park 2A	12	1	12
	SS2B	South Stew-Griffin Park 2B	12	1	12
	SSAW	South Stew-Anderson West	5	1	5
	STRD	Steward Rd	12	1	12
	SYCR	Sykes Creek	10	1	10
	TAC1	Tallowbox Creek 1	8	1	8
	TAC2	Tallowbox Creek 2	8	1	8
	UPLP	Upper Lithia Park	8	1	8
	UPT1	Upper Table Rock BLM 1	8	1	8
	UPT2	Upper Table Rock BLM 2	9	1	9

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Project	Site Code	Site Name	Stations	Visits	Surveys
Oaks:	UTNC	Upper Table Rock TNC	10	1	10
Rogue Valley	WALC	Wall Creek	3	1	3
<i>continued</i>	WGCR	Wagner Creek	12	1	12
	WHSA	Whetstone Savannah	9	1	9
	WOWG	White Oak Farm	8	1	8
	WPHS	Westwood Park / Hald-Strawberry Park	4	1	4
	WRMT	Woodrat Mountain	11	1	11
	WRII	Wren Ridge	12	1	12
Subtotal			703	71	703
Oaks:	BRIG	Private Landowner ³	10	3	30
Umpqua Valley	GESE	Private Landowner ³	6	3	18
	HOLL	Private Landowner ³	12	3	36
	KAN1	Kanipe Park 1	9	3	27
	KAN2	Kanipe Park 2	8	3	24
	KATI	Private Landowner ³	13	3	39
	NOB1	North Bank 1	13	3	39
	NOB2	North Bank 2	11	3	33
	SABO	Private Landowner ³	12	3	36
	SPEN	Private Landowner ³	1	3	3
	TILB	Private Landowner ³	11	3	33
	WAY1	Private Landowner ³	6	3	18
Subtotal			112	36	336
Oaks:	BOB2	Robert's Ranch 2	5	1	5
Fuel Treatments	BOB3	Robert's Ranch 3	7	1	7
	BOB4	Robert's Ranch 4	8	1	8
	CHI1	China Gulch 1	9	1	9
	DEM2	Deming's Gulch 2	3	1	3
	DEM3	Deming's Gulch 3	11	1	11
	ECA2	Eagle Canyon 2	9	1	9
	GEO1	George Black Gulch	15	1	15
	MCOA	McCormick Gulch A	5	1	5
	MCOB	McCormick Gulch B	11	1	11
	PMA1	Poorman's Creek 1	12	1	12
	STEA	Sterling Creek A	5	1	5
	STEB	Sterling Creek B	4	1	4
	WAT2	Water Gulch 2	9	1	9
	WATG	Water Gulch	7	1	7
Subtotal			120	15	120
Oaks:	CALE	Caledonia East	11	2	22
Upper Klamath	CALW	Caledonia West	12	2	24
Subtotal			23	4	46
¹ Two points added in 2011					
² Sum of maximum visits to a site					
³ Private landowner name withheld					
Grand Total			1911	271	2401

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Table 2. KBO area search and vegetation survey effort during fall of 2011 [Stations = number of stations surveyed during fall visits; Days = number of survey days to complete the site in fall].

Project	Site Code	Site Name	Stations	Visits
Restoration				
Fourmile Meadow	FMME	Fourmile Meadow East	11	2
	FMMW	Fourmile Meadow West	11	2
	WMNO	Wright's Meadow North	14	2
	WMSO	Wright's Meadow South	13	2
Subtotal			49	8
Trinity River ¹	COCR	Conner_Creek_ESL	2	6
	HOFL	Hocker_Flat_ESL	6	6
	HOCK	Hocker_Flat_CES	1	6
	INCR	Indian_Creek_ESL	3	6
	SFRD	Steiner_Flat_CES	2	6
	SVEN	Lewiston_Sven_CES	2	5
	VAGU	Valdor_Gulch_ESL	6	6
	ZZ	Lewiston_ZZ	1	6
	05R	Reach_05_Right	9	6
	08R	Reach_08_Right	3	6
	09R	Reach_09_Right	5	6
	11R	Reach_11_Right	9	6
	12L	Reach_12_Left	10	6
	13R	Reach_13_Right	10	6
Subtotal			69	83
¹ Vegetation surveys were completed during 1-2 visits depending on spring effort. Two playback survey visits were completed at each area.				
Grand Total			118	91

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