

**Project Title:** Lewis Woodpecker Nesting Box

**FWCP:** COL-F17-W-1219

**Prepared for:** Fish and Wildlife Compensation Program

**Prepared by:** Richard Hoar

Prepared with financial support of the Fish and Wildlife Compensation Program on behalf of its program partners BC Hydro, the Province of BC, Fisheries and Oceans Canada, First Nations and public stakeholders.

Date: 08-12-2016

### **Executive Summary**

The Lake Windermere District Rod & Gun Club (LWDRG) is constructing and then placing nesting boxes for Lewis Woodpecker (Species at Risk) within its historical range in the Invermere area. The placement of boxes is on both Crown and Private property where cavity nesting trees have diminished significantly. Boxes are as well being placed along powerlines where poles have been impacted and are to be replaced. We are also working with the Farmland Advantage program for placement of boxes on agriculture land where birds have been observed and/or cavity trees have been lost. The nesting box project has been well received in the community so well to the extent that spending the grant money has proven a problem due to high return in volunteering time and expenses.

### **Introduction**

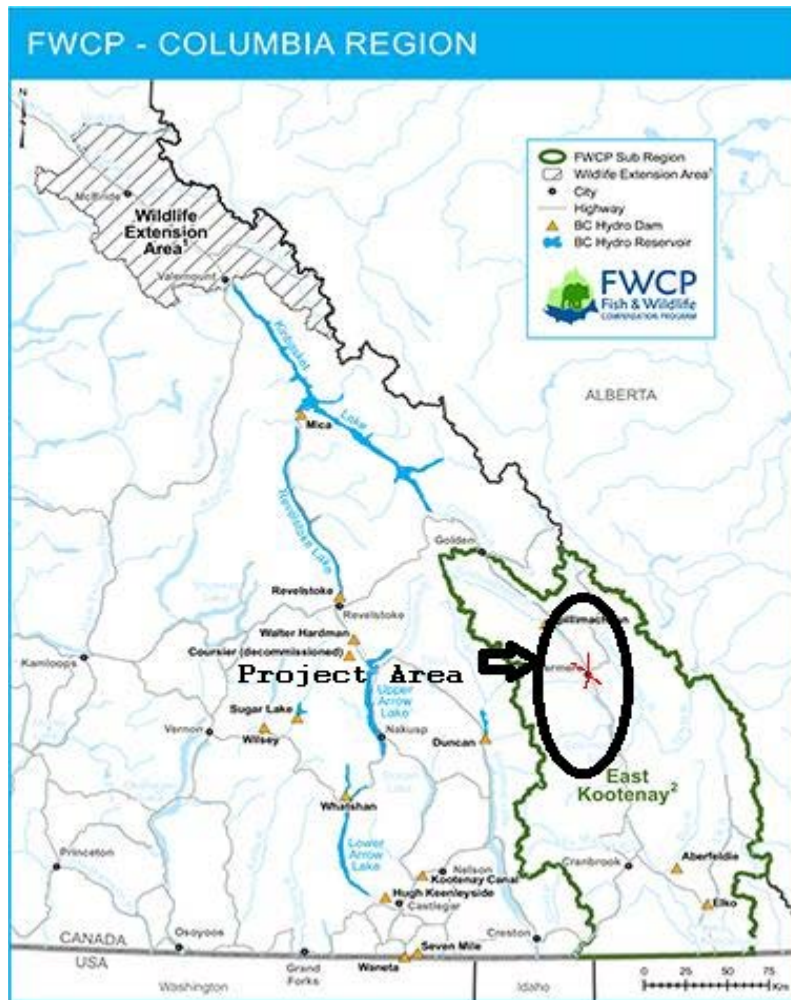
The Lake Windermere District Rod & Gun Club has been placing Lewis Woodpecker nesting boxes for the past 3 years on Crown land where severe decrease in nesting cavities due to wildfire and on private lands where nesting cavities have been removed. The Lewis Woodpecker a Species at Risk under SARA only nests in the southern portion of BC. Wildfires in the Invermere area have negatively impacted available and historical nesting trees. As well commercial and agriculture practises have impacted nesting trees due to safety concerns and land clearing.

### **Goals and Objectives**

The goal of the program is to place nesting boxes in impacted areas and maintaining them until natural cavities become available. The area first chosen was along the BC Hydro Transmission line in the Sun Creek area north-west of Canal Flats. Lewis Woodpecker is using cavities created in transmission poles due to the lack of natural tree cavities impacted by wildfire. As these poles could be replaced anytime resulting in instant removal of nesting cavities, boxes were deemed a good way to mitigate this possibility.

## Study Area

The nesting box placement area takes in historical Lewis Woodpecker nesting areas from Canal Flats to Brisco, as shown on the map below.



## Methods

The boxes are built from Douglas Fir non-planed boards cut especially for the club from a local mill. The boards are cut in the spring, stacked and dried over the summer and boxes built in the late fall. Douglas Fir was chosen due to its strength, resistance to moisture and availability. Box design is taken previous designs used in studies from the USA. Our boxes have one modification that being to use a slab board with and without bark (see below) on it for the front board instead of a rough cut board with bark attached as was used in other studies. The boxes are also treated with an organic environmental approved weather resistant product called Lifetime Wood Treatment from Valhalla Wood Preservatives Ltd., New Denver, B.C.



The boxes are placed in the field in the fall in live trees 13 ‘– 15 ‘high up. This height allows easier observations as well as maintenance during yearly checks. This height was determined from earlier studies in the USA. A professional tree climber is used to place the boxes in the trees with the assistance of a person on the ground (see below). Each box has the GPS location taken and the tree marked with identification sign. Box placement this year took place along the remaining area adjacent to the hydro transmission line where poles have active cavities. As well some boxes were placed on adjacent Nature Conservancy Canada covenant property.



## Results and Outcomes

Grant money was spent on monitoring of all boxes on Crown and Nature Conservancy property during 2 outings. Once during the Lewis Woodpecker Survey carried out by Bird Studies Canada in which club members assist in June. The second monitoring took place in mid-July. Monitoring also takes place on private property by property owners where boxes have been placed. Lewis Woodpeckers have not used any of the boxes to date however have shown an interest in some boxes on golf course property at Fairmont. Some boxes have been used by other cavity nesters along the hydro line which include flicker, bluebirds and tree swallows. Use by other cavity nesters had been expected where cavity lost has occurred. To date this has involved 6 boxes over 2 years of the 70 boxes now in place. Grants money allotted for a professional tree climber was not used as this person volunteered their time and did not want to be paid.

The grant money from F&W Compensation Program was used for the fall installation of 19 boxes. These boxes were placed along the BC Hydro Transmission line and Nature Conservancy Canada adjoining property. Each box receives a number (L50) and GPS location (UTM) for future identification and location as well as the tree receives an identification sign as shown in above photo. The following boxes were the ones placed:

L50	21-OCT-16 2:48:43PM	11 U 578257 5566744
L52	21-OCT-16 3:08:38PM	11 U 578226 5566780
L54	21-OCT-16 2:20:11PM	11 U 578127 5565317
L55	21-OCT-16 2:13:58PM	11 U 578166 5565290
L56	21-OCT-16 3:03:00PM	11 U 578238 5566839
L57	21-OCT-16 1:14:33PM	11 U 578775 5563331
L58	21-OCT-16 10:10:43AM	11 U 579226 5563637
L59	21-OCT-16 10:44:13AM	11 U 579229 5563232
L60	21-OCT-16 2:07:18PM	11 U 578222 5565237
L61	21-OCT-16 2:53:06PM	11 U 578271 5566818
L62	21-OCT-16 11:29:41AM	11 U 578866 5561021
L63	21-OCT-16 1:31:46PM	11 U 578724 5563502
L64	21-OCT-16 12:59:29PM	11 U 578937 5563461
L65	21-OCT-16 12:54:50PM	11 U 578964 5563332
L66	21-OCT-16 9:58:41AM	11 U 579125 5563798

L67	21-OCT-16 10:47:01AM	11 U 579275 5563281
L68	21-OCT-16 9:46:44AM	11 U 579063 5563858
L69	21-OCT-16 12:44:44PM	11 U 578935 5563391
L70	21-OCT-16 9:33:12AM	11 U 579399 5563856

### **Acknowledgements**

The Lake Windermere District Rod & Gun Club wishes to acknowledge the financial support from Fish & Wildlife Compensation Program (FWCP) for this year's monitoring and box placement program. FWCP was recognized at 2 Farmers markets we attended where a Lewis Woodpecker Box was displayed (see photo below). The club as well greatly appreciates the volunteer labour contribution by its members.



### **References**

Kook, Diane and Moodie, James D. 2009. Using nest boxes for Lewis's Woodpecker conservation in Central Oregon.

East Cascades Audubon Society, Bend Oregon, USA. Lewis Woodpecker Project, Nest Box information and design.