

BLUEBIRDS AND CLEARCUTS

G. A. WILDE, Box 1196, Hinton, Alberta T0E 1B0

The success of bluebird trails in western Canada led me to believe that clearcut areas in the boreal and subalpine forests would provide suitable habitat for Mountain Bluebirds and Tree Swallows if nesting sites were provided.^{3 4 5 6} In April 1976, I placed 100 nesting boxes in and adjacent to clearcut areas at Hinton, Alberta. The former status of breeding populations was not known; however, in 1976 nine boxes were occupied by Mountain Bluebirds and two by Tree Swallows. This nearly equals the success of first year bluebird trails in prairie habitat.⁴ The major competition for nesting sites was by Red Squirrels (*Tamiasciurus hudsonicus*) and Deer Mice (*Peromyscus maniculatus*).

The trail is located north of Hinton in the foothills of the western cordilla region (Fig. 1). Elevations range from 1219-1524 m, with an annual precipitation of 400-450 mm and a mean annual temperature of 3°C. It has grey wooded soils with well developed drainage patterns.^{1 2} Previously the forest cover was large homogeneous tracts of Lodgepole Pine (*Pinus contorta*), Alpine Fir (*Abies lasiocarpa*) and White Spruce (*Picea glauca*). The area now contains numerous clearcut blocks, some as large as six square miles.

During the summer of 1975, the Junior Forest Wardens constructed 100 nest boxes following directions supplied by Lorne Scott of Regina. In April, 1976, these were erected along

the Northwestern Pulp and Paper Management Trail (Fig. 1). The boxes were fastened on residual vegetation or posts at a height of 1.0-1.5 m. They were on opposite sides of the trail (approximately 30 m from the road) and spaced at 0.5 mile intervals. The nesting boxes were monitored in May, June and October.

The success of the project was greater than anticipated, and with the addition of 100 nesting boxes for the next season I am convinced bluebirds and tree swallows will be established in the clearcut areas.

I was pleasantly surprised at the lack of vandalism and the absence of competition by House Sparrows, Starlings. The two major problems were the faulty construction of some nesting boxes and the destruction of the boxes by Red Squirrels in an area adjacent to Lodgepole Pine stands.

- ¹Anonymous. 1969. Atlas of Alberta. University of Alberta, Edmonton.
- ²Anonymous. 1968. Alberta Forest Inventory. Alberta Forest Service, Edmonton.
- ³BURNS, R., D. STAPLEY, R. SUER and K. TRANN, Project nest survey. Edmonton, 1972. Blue Jay 31:89-91.
- ⁴KARGUT, J. 1974. Bluebird project. Langham. Blue Jay. 32:106-107.
- ⁵PINEL, H. W. and J. C. ROBINSON, Calgary bluebird trail. Blue Jay 32:108-110.
- ⁶SCOTT, Lorne. 1974. Indian Head bluebird trail. Blue Jay 32:107-108.

Table I

Species	Number of Boxes Used		
	May 20	June 4	Oct. 27
Mt. Bluebird	5	9	2 (dead young)
Tree Swallow	—	2	1 (eggs)
Red Squirrel	2	4	12*
Deer Mice	1**	—	3**

*Red Squirrels completely destroyed the boxes by gnawing at the plywood.
 **The nests were removed and the mice captured.

Note: Wind damage or faulty construction also affected eight nesting boxes.