Burch; Brandon — Mrs. Barbara Robinson, John and Marion Robinson, Mamie, Helen and Margaret Mc-Cowan, Hazel Patmore, Daisy and Muriel Patmore, Barbara Robertson, Dr. and Mrs. Richard Rounds and family, Mr. John Plum, Mr. W. Forsyth, Linda Muzyka, Marlene Brechka, David Randall, Ken James, Ken Leslie, Betty Shankland, May Tucker, Mrs. John Lane and Junior Birders Steven and Martin McFarlane, David Senchuk, David Voorhis, Heather Horton.



Mountain Bluebird nest and eggs.

Gary Seib

CALGARY AREA BLUEBIRD TRAILS — 1980

DON STILES, 20 Lake Wapta Rise SE, Calgary, Alberta T2J-2M9.

This article gives results for 1980, the second year in which members of the Calgary Field Naturalists' Society have been monitoring Harold Pinel's Calgary Bluebird Trail.¹² In addition, results are given for trails of Andrew Stiles, Blake Stillings and a new section of trail west of Longview monitored by Kay Morck. The drop in houses monitored on Harold Pinel's trail from 309 last year to 205 this year

was due to dropping of certain sections which had primarily House Sparrows and Tree Swallows but no bluebirds, and also the incorporating of 55 houses into Blake Stillings' trail for convenience in counting.

Our schedule:

 March or early April — Set up new houses. Cleaned out old houses and sprayed with a 10% creolin solution.

- 2. May 24 + 1 week Counted Mountain Bluebird eggs.
- June 15 + 1 week Counted and banded bluebird young and counted Tree Swallow eggs.
- July 4 + 1 week Counted and banded Tree Swallow young and looked for second broods of bluebirds.
- Early August Made a last check of the nests to look for infertile eggs, dead young and late Tree Swallow broods.

These steps were generally followed except for number 5 which was done for only a small portion of the houses.

Table 1 gives an idea of the percen-

tage of bluebird and Tree Swallow nests, as well as some incidental information such as House Sparrow and wren nests, boxes used more than once (a good percentage of these were double broods of bluebirds), boxes vandalized and boxes not used.

1980 was the best bluebird year in the Calgary area since records have been kept (1973). This is believed due to a warm dry May which resulted in early nesting of the mountain bluebird and therefore more double broods than usual. About 25 May a strong spring storm passed through which did result in finding a few bluebird nests with dead young.

Andrew Stiles

Total

Table 1. CALGARY BLUEBIRD TRAILS - NESTING RESULTS 1980

Most of

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	нагою	West of Blake Allulew Stiles			Total	
	Pinel	Longview	Stillings	Priddis	Didsbury	
No. of Boxes	205	23	312	62	106	708
Miles of Line	128	21	130	40	60	379
No. of Mountain						
Bluebird Nests	56	12	86	56	30	235
% Successful Nests	73	92	94	91	83	89
Eggs	292	75		290	158+	
Young Fledged	186	47	392	240	127+	992+
Clutch Size (Eggs)	5.21	6.25	Inc.*	5.17	5.27	Inc.
Young/Successful Nest	4.53	4.27	4.83	4.71	5.08	4.75
No. of Tree Swallow						
Nests	131	12	218	27	69	457
% Successful Nests	83	67	96	96	94	91
Eggs	714	52	Inc.	137	372+	Inc.
Young Fledged	503	40	1174	128	335+	2180+
Clutch Size (Eggs)	5.45	4.33	Inc.	5.07	5.39	Inc.
Young/Successful Nest	4.61	5.00	5.62	4.92	5.15	5.23
House Sparrow Nests	23	0	20	2	9	54
Wren Nests	1	0	4	4	3	12
Boxes Used More Than						
Once	20	2	26	29	14	91
Vandalized	11	0	2	3	5	21
Boxes Not Used	6 <u>+</u>	4	4	1	2	17+

^{*}Incomplete data

Knowledge of the breeding range of bluebirds has been extended this year. Kay Morck has shown that bluebirds occur from six miles west of Longview to the Kananaskis road. No bluebirds are found on the northsouth road from Black Diamond to Chain Lakes. Blake Stillings found bluebirds south of the Elbow River on a newly set up trail from the Trans-Canada Highway to Bragg Creek. It will be interesting to see if they are found north of the Elbow in subsequent years. Ann Machin and Betty Haines found two bluebird nests near Calgary this year although none were found last year. Betty Haines has bluebirds nesting in her backyard on Bearspaw Road north of the 1A highway. This may represent eastern "island" of bluebird nesting as the bluebird trails show no bluebirds in the immediate Cochrane area.

In general, bluebirds are found near the following settlements: Millar-ville, Priddis, Bragg Creek, southwest of Calgary, Bottrell, Water Valley, Cremona, Sundre, and east of Didsbury. Nearly all houses not occupied by bluebirds have Tree Swallows in them, with an occasional house occupied by wrens and some by House Sparrows, the enemy of the bluebird and Tree Swallow.

Banding: No banding was done in 1980 since no biologist with a banding permit was available. Six band recoveries were made by Don and Andrew Stiles. Two were bluebirds banded as adults by Martin McNicholl in 1979 in the Priddis area. Both were using the same nest they were banded in. Also two Tree Swallows banded by Martin McNicholl in 1979 in the Priddis area were recovered, one in the same nest and one 21/2 miles away. Finally two Tree Swallows banded by Harold Pinel in the east Didsbury area were recovered. One was banded in 1977 as an adult and recaptured 3

miles away. The second was banded as a young in 1976, recaptured in 1978, 12 miles away and in 1980 recaptured 3 miles from the 1978 location. This instance lends further support to the theory mentioned by Harold Pinel that young birds tend to disperse but adult birds tend to return close to their home territory. Of the latter two birds recaptured, one was known to be four years old, and the other at least four years old.

Highlights: Blake Stillings claimed several interesting happenings for the year. He found one nest where Tree Swallows had raised 5 Tree Swallows and one bluebird. In another nest he noticed that one Tree Swallow had hatched earlier than the others. He noticed some Tree Swallow nests where the birds were just hatching and happened to monitor them again as they were just fledging and calculated the hatching to fledging time to be 19 to 20 days.

He had one nest with 9 wren young which fledged. He had one chickadee nest which was unsuccessful. This is the first time in several years that a chickadee nest has been reported.

Don Stiles found one nest near a farm which was a good example of House Sparrow depredation. On 31 May this house had 4 House Sparrow eggs and one dead Tree Swallow in the bottom. The nest was cleaned out and on 17 June the House Sparrows were again building a nest but this time there was a dead male bluebird and a dead Tree Swallow in the bottom. The top was left off this nest for the remainder of the season to prevent further recurrences.

¹PINEL, H. W. 1980. Reproductive efficiency and site attachment of Tree Swallows and Mountain Bluebirds. *Blue Jay* 38(3): 177-183.

²STILES, D. J. 1980. Calgary Area bluebird trails — 1979. *Blue Jay* 38(3): 184-185.