

# BRITISH COLUMBIA NEST RECORD SCHEME

## 47<sup>th</sup> Annual Report - 2001 Nesting Season



R. Wayne Campbell, Michael I. Preston, and Linda M. Van Damme

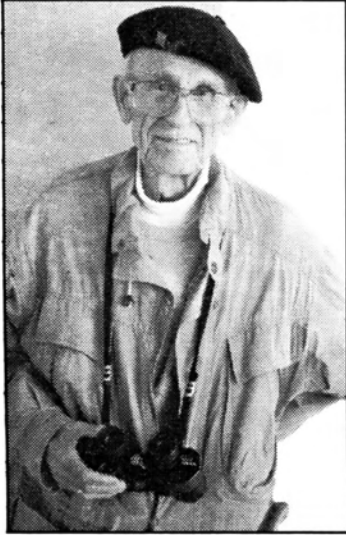
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WBT Wild Bird Trust of British Columbia Wildlife Report No. 8

## PARTICIPANT PROFILES

The longevity of the **British Columbia Nest Record Scheme** is due to the support it receives from hundreds of volunteer field naturalists each year and the thousands of people over its 47-year history who have believed that the information they gathered benefited research, conservation, and education. Two naturalists, who were part of the original development of the BCNRS, and who have contributed regularly over the years, are profiled here.

### John G. (Jack) Sarles



Jack's intimate association with birds began in 1918, when as a boy, he explored the swamps and fields along the shores of the Bay of Quinte in Ontario looking for birds and their nests. He moved west in 1937, to Vancouver, where his passion was rekindled by his association with the late William M. (Bill) Hughes, who at that time was chairperson of the Ornithology section of the Vancouver Natural History Society. Jack joined the VNHS in 1955 and immediately became involved in many research projects and began contributing to the BCNRS.

Jack, and his wife Rosamond, organized the first census of Cliff Swallow colonies on the Lower Mainland. At that time, large colonies were established on buildings, barns, and bridges throughout agricultural and urban areas. This study has formed the baseline on which we can better evaluate and understand the decline of this species in Greater Vancouver.

Jack continued his research but soon became involved in projects that saved birds lives and protected their breeding grounds. In the 1960s, thousands of birds were being shot at the Vancouver International Airport as part of a program to discourage their use of the fields. Jack was part of an army of volunteers from the Vancouver Natural History Society that conducted regular surveys of birds on airport grounds and later became involved in a "trap and release" program that involved banding birds. The lives of hundreds of Short-eared Owls were saved. He was also instrumental in obtaining sanctuary status for hundreds of breeding seabirds on Christie Island, located in Howe Sound north of Vancouver.

To further his passion for bird study, Jack and Rosamond spent a memorable week on the ocean with 1,000 bird watchers from around the world. The voyage was sponsored by the International Ornithological Congress and covered Greenock in Great Britain, a sail around the Hebrides, and a return trip to Edinburgh in Scotland. Then they drove to Oxford for bird lectures!

Jack and Rosamond are founding members of the White Rock and Surrey Naturalists Club and have been honoured with a Life Membership in the Vancouver Natural History Society. Jack also received the Kay Nye Award from the VNHS for outstanding service. At 93 years of age Jack says his association with "the birders" and the birds of British Columbia has enriched his life immeasurably.

### Alexander (Allister) Muir



Allister first became interested in wildlife, especially birding, in 1948 while taking a high school science course in Great Britain. The teacher made the subject so fascinating that he became "hooked" and over the years his interest developed into a passion that has sustained him throughout his life. His early experiences were established in Scotland, later in England and Wales, and finally in Canada where he has remained since 1955. Over the next 47 years he and his wife (Marg) have enjoyed birds through travels across Canada and throughout the United States, including Alaska and Hawaii, as well as in New Zealand, Fiji, and western Europe.

The British Nest Record Scheme attracted Allister while in Great Britain and in 1956 he became involved in establishing a similar scheme in British Columbia along with Timothy Myers, Jack Sarles, and others. He has submitted cards every year as he travelled around British Columbia in his career with the Royal Bank of Canada.

His interest in birds was stimulated and maintained during the 1960s by his association with William M. (Bill) Hughes, Frank Oldaker, Jack and Rosamond Sarles, and Wayne Campbell. He held a federal banding permit for 6 years and operated a banding station in West Vancouver and Burnaby. He also participated in censusing breeding marine birds on Passage Island, Christie Island, and Snake Island off Nanaimo. He is a Life Member of the Vancouver Natural History Society, a member of several provincial natural history clubs, and is presently a regional co-ordinator for WBT Wild Bird Trust of B. C.

Allister has been part of the solid base upon which ornithology in British Columbia has been built. He does not foresee his interest in our avian neighbours being lost and he was quick to point out that he "plans on birding to the end!"

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Compiled by

R. Wayne Campbell, Michael I. Preston and Linda M. Van Damme



WILD BIRD TRUST  
of British Columbia



Federation of British Columbia Naturalists



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# THE 2001 NESTING SEASON

## Summary

The most significant event of 2001 was the completion and publication of the final volume of *The Birds of British Columbia*. What sets these four-volumes apart from other regional bird books is the immense data set on breeding information that has been amassed over the past 47 years by volunteers. Collecting the nesting data has allowed detailed analysis of habitats, clutch and brood sizes, regional breeding chronologies, nest heights, nest materials, nest locations, incubation periods, productivity, and Brown-headed Cowbird parasitism. It has been an immense effort by everyone and we should all feel proud that the information has been made available to a wide audience.



*A Pileated Woodpecker adult feeds young at the nest. Photo: Mark Nyhof*

The volumes are having an immediate impact in the conservation of birds in the province but some of the information is already outdated. Since the publication of volumes 1 and 2 in 1990 we have received nearly 70,000 new nest cards. As part of its mandate, the **WBT Wildlife Data Centre** in Victoria is presently organizing its extensive databases to constantly update information on birds (and other wildlife) in British Columbia and make it readily available, in summarised form, through publications, lectures, workshops, and a web site.

Like the two previous breeding seasons, weather in 2001 was less than average throughout much of British

Columbia and it was generally felt that many species did not breed at all and others had poor reproductive success. As an example of weather conditions locally, **Evi Coulson** wrote that in the **Smithers** area "it was again extremely wet and the spring was cold. By the time we left to go north for the summer on June 19 the mosquitoes hadn't emerged yet and warblers could be seen flying very low over the ground or walking over it trying to find bugs. Berries ripened 3-4 weeks late and in the alpine not many made it to that stage."

In the **Quesnel** area, **Sandy Proulx** reported that **Mountain Bluebirds** made fewer nesting attempts and fledged fewer young in 2001 than in any of the three preceding years. Clearly, it was a bad year for bluebirds.

The momentum of the 2000-nesting season carried into the New Year. It started promptly on January 1 when **Janice Arndt** checked some of her **Rock Dove** nests in **Nelson**. Later in the year, **Linda Van Damme** checked around town to see if they were still nesting but many shopkeepers had put up wire mesh under their awnings to discourage the birds as they were causing such a foul mess!

A few nests were found in February, March, and April. At **Swan Lake** near Victoria, **Geoff Barnard** watched an ambitious **Red-winged Blackbird** try to build its nest just before the New Year but it fell apart eight days later. On February 7, however, he found an **Anna's Hummingbird** building a nest. By mid-month, during a snowstorm, the female was sitting on an egg that hatched on March 3. The chick left the nest on March 29! At **Salmon Arm**, **Ted Hillary** found a **Rock Dove** nest with a single egg. By May the "real" nesting season began. It ended on October 23 when **Chris Siddle** discovered a **Western Grebe** still feeding a 7/8 grown young.

The final tally was again impressive. During 10 months of field work **288 participants** submitted **6,122 cards** for **232 species**. In addition, another **2,023 nest cards** were extracted from historical field notes bringing our **grand total to 8,145 new cards**. About 700 additional cards could not be incorporated into this season's report as they were received too late. We usually compile and write the report in December each year for a January publishing date. This year, however, the report had to be ready for the printers by December, mainly due to financial constraints. We are sorry to not have included substantial numbers of cards from several people. These include a detailed set of 100+ cards sent in by **Donna-Rae Williams** from the **Cariboo-Chilcotin** region, 110+ cards by **Glenn Ryder** from the **Lower Mainland**, 125+ cards by **Harry van Oort** from the **Gulf Islands**, and 50+ cards by **Linda Durrell** from the **Chilcotin River** area. Fewer cards were also received from **Marcus Womersley** (**Smithers** region) and **Martina Frey** (**Mackenzie**).

Also not included in this year's report were many nesting records for **American Avocet** and **Long-billed Curlew** that arrived in late November. This information, and other cards that are scheduled to arrive in December, will be summarized in the 2002 annual report.

No new breeding species were discovered this season. Some noteworthy species with only one breeding record included **Red-throated Loon**, **Clark's Grebe**, **Surf Scoter**, **Wandering Tattler**, **White-headed Woodpecker**, **Sage Thrasher**, **Crested Myna**, **Bay-breasted Warbler**, **Yellow-breasted Chat**, and **Gray-crowned Rosy-Finch**.

Over 100 nest cards were submitted for nine species with **Cliff Swallow** (1,729 nests) and **Ring-billed Gull** (1,019 nests) topping the list. The **American Coot** (141 cards), **California Gull** (271 cards), and **Osprey** (182 cards) were surprisingly well represented. In total, these nine species accounted for nearly 60% of all cards received.

About **1,470 requests** for information were received during 2001 of which 563 were filled. **Thirty-seven** publications incorporated details from our databases.

We welcome first time contributors **Doug Brown**, **Laure Neish**, **Kirk Safford**, **Alf Atkins**, **Lloyd Atkins**, **Aldo Cogrossi**, **Daniel Bastaja**, **Bona Baillie**, **Suzanne Beauchesne**, **Jennifer Bergen**, **F. Don Young**, **Jennifer Brownlow**, **Tony Buckle**, **Michelle Canmons**, **Kyle Elliott**, **D. Finnestad**, **Peter Jannink**, **Billie Gowans**, **E. Haan**, **Robin Jones**, **April L. Maurer**, **A. McInnis**, **Viveka Ohman**, **Carlo Pavan**, **Klaus Ploeger**, **Sue Port**, **Louise Rice**, **R. S. Sexton**, and **Ken Suedden**.

## Highlights

### Species

Four significant range extensions were reported. While hiking along the Diamond Head Trail in **Garibaldi Park** on August 6 at 4,500 feet in elevation, **Viveka Ohman** and **Penny Stedman** noticed a female **Spruce Grouse** dust bathing or making herself comfortable in a depression in the ground. Then they noticed 3 chicks running around in front of her! The Spruce Grouse commonly breeds throughout most of the interior of the province east of the Coast Ranges.

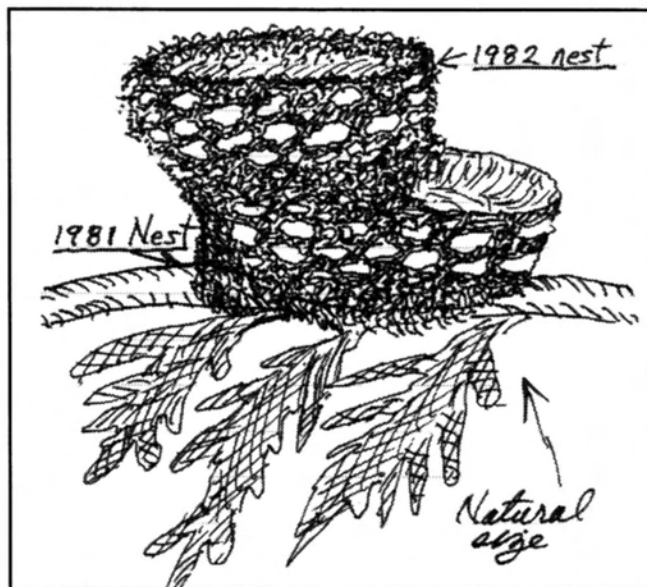
The **Anna's Hummingbird** is slowly extending its range eastward across southern portions of the province and northward into the Thompson Valley and Cariboo. The breeding range is more difficult to determine because nests are difficult to find. **Valerie Welde**, however, was fortunate to locate a nest on **Texada Island**. It was built at the end of a Douglas-fir branch only 4 feet off the ground. On April 15 it held 2 eggs and on May 13 there were 2 babies. The young had fledged by her May 25 visit.

**Allister Muir** kindly updated our knowledge of the breeding range of the **House Sparrow** in central BC. While working in **Houston** from 1968-70 he noted that up to 14 House Sparrows roosted each winter above his head in the Credit Union building. In the summer of 1968 he found a breeding pair in one of the flat-roofed buildings. The sparrows were new to the area and Allister assumed that they "arrived" in town via the CN Railway in grain cars.

**Least Flycatchers**, once considered a very rare migrant in the Lower Mainland over the past decade, have

now established small breeding populations locally. Nesting was suspected in 1998 at **Cheam Lake**, near Popkum in the upper Fraser River valley, and in 2000 **Daniel Bastaja** finally found a nest with adults feeding young on June 30.

In the late 1960s and early 1970s, **Wayne Campbell** and **Ken Kennedy** climbed ladders and checked hundreds of individual **Cliff Swallow** nests in **Burnaby**. After all these years of the information sitting in notebooks, they settled down to the laborious task of transferring the information to nest cards.



*A double-decker Rufous Hummingbird nest, a rare find in British Columbia. Sketch: Glenn R. Ryder*

The breeding chronology for species changes constantly as new information is assembled. This year, reports of new early and late dates included: **Common Loon** (**Wayne C. Weber** on **Nicola Lake**, September 17 – adult feeding large young that is similar to latest date of September 27), **Eared Grebe** (**Wayne C. Weber** on **Mitchell Lake**, September 9 – young with striped heads about 2/3 full grown that is similar to latest date of September 15), **Northern Shoveler** (**Calvin Gehlen** at **Iona Island**, April 24 – 14 ducklings (Class 1A) that precedes earliest date by 11 days), **Red-winged Blackbird** (**Chris Charlesworth** at **Kelowna**, April 11 – 1 egg that precedes earliest date by 35 days), **Western Grebe** (**Chris Siddle** on **Okanagan Lake**, October 13 – 1 young 7/8 full size begging for food from adult that extends late date for 12 days), **Wild Turkey** (**Lucile Campbell** at **Radium**, September 22 – young about 2/3 full grown that extends late date for a month), and **Osprey** (**Wayne C. Weber**, west of **Merritt**, September 20 – adult brought fish to juvenile on nest platform and **Gerrie Patterson** at **Crawford Bay**, September 23 – 2 young still in nest that extends late date for 19 days), and **American Crow** (**Linda Van Damme** – nest with 2 eggs in **Castlegar**, April 4 that is 5 days earlier than previously reported. Any **Black Swift** nest is noteworthy, even if it is old. **Kirk Safford**

discovered a nest near a waterfall in **Bowron Park** that contained a dead chick from the year before.

Other noteworthy finds included a **Veery** nest with eggs (**Manfred Roschitz** near Quesnel), a **Greater Yellowlegs** nest with 7 eggs (**Brent Olsen** near Taweel Lake), a **Sharp-shinned Hawk** nest discovered by **Marcus Womersley** near Smithers that fledged 4 young but the parents consisted of an adult male mated with an immature female, a lazy pair of **Eastern Kingbirds** found by **Glenn Ryder** on Knox Mountain near Kelowna who laid their eggs in an old **Townsend's Solitaire** nest in a road cut bank, and finally a shrewd pair of **Western Kingbirds**, watched by **Janne Perrin**, that successfully raised their brood in a nest built within an **Osprey** nest at Spences Bridge.

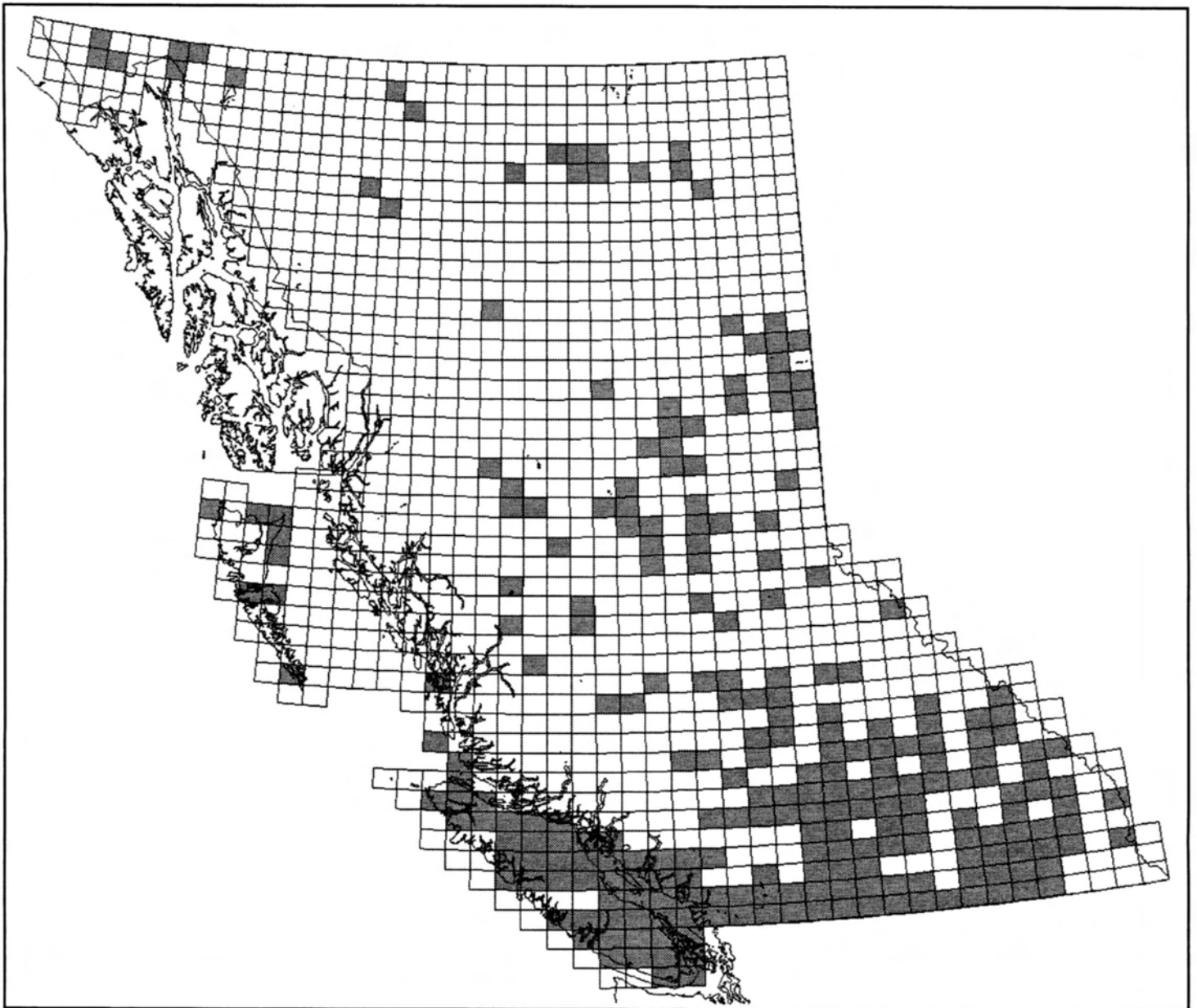
Details arrived too late for three significant range extensions, namely **Swainson's Hawk** nesting near

Dawson Creek and **Bobolink** and **Broad-winged Hawk** near Golden. These locations will be checked next year to confirm activity and numbers.

### Coverage

The map clearly shows that most nest-finding forays occurred across the southern third of the province from Vancouver Island, north to the Thompson Valley, east to the vicinity of Shuswap Lake, and southeast to the Creston Valley. Nearly 30% of all grids in the province were represented this year. The biggest surprise was the thorough coverage of **Vancouver Island** (80% of grids) while on the **Sunshine Coast** 100% of all grids had breeding records. Nearly 300 nest cards were submitted for the latter area.

Michael and Joanna Preston, Mark Nyhof, and



*Provincial coverage for the British Columbia Nest Record Scheme in 2001*



Andrea Norris completed coverage on **Vancouver Island**, especially some of the interior areas that are difficult to reach. **Peter Elliott** continues to provide us with information from **Cortes Island**.

Glenn Ryder, Linda Van Damme, Doug Brown, Chris Charlesworth, Aldo Cogrossi, Wayne Campbell, Michael Preston and Arnold Skei searched the **Sunshine Coast**.

The **Okanagan Valley** was scoured by **Mark Nyhof**, the **Creston Valley** by **Linda Van Damme**, the **Shuswap Lake** region by many birders thanks to the encouragement of **Hilary Gordon**, southern **Vancouver Island** by **Ray Williams**, and the **Cariboo-Chilcotin** region was well represented by **Beverly Butcher**. **Todd Heakes** and **Marcus Womersley** again were the committed nest finders from northern areas of the province.

Over 600 cards were submitted for a single grid with 26 grids represented by more than 25 cards. The top five areas were **82F/2** (Creston Valley – 602 cards), **92G/5** (Sechelt area – 250+ cards), **92G/12** (Ruby Lake on the Sunshine Coast – 189 cards), **82E/14** (Salmon Arm – 153 cards), and **92B/06** (Victoria – 107 cards).

### Participants

**Linda Van Damme** continues to set the standard for nest finding and reporting and showing an enthusiasm and patience for exciting others to become involved in the **BCNRS**. Most of her nesting season was spent on the **Sunshine Coast** where she was conducting research and plodding through dense coastal vegetation searching for nests. There, a good day might yield 3 nests! In early July, she returned to Nelson and quickly left for the **Creston Valley**, where collecting breeding records was more fun, less dangerous, and more productive. With only part of a season to explore some of the more productive areas of the province, she still managed to top all contributors with 751 cards. The higher totals for others (e.g., Wayne Campbell, Glenn Ryder, and Ken Kennedy) represented both current and historical records.

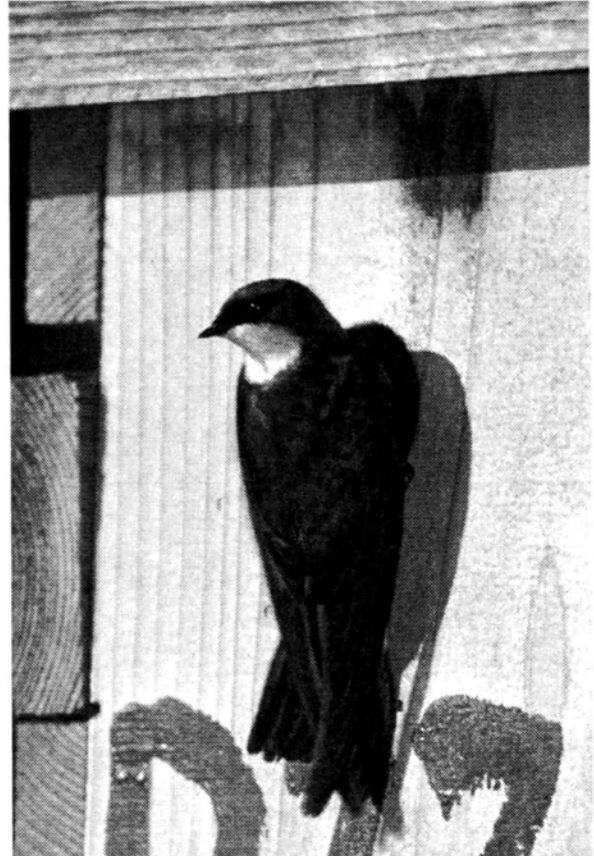
While on the Sunshine Coast, Linda introduced two experienced birders to the challenge and excitement of finding nests. Both fellows became "hooked" and together **Doug Brown** and **Chris Charlesworth** submitted **353 cards** this year. When they returned home to the Okanagan Valley in July both blitzed the marshes, lakes, forests, and grasslands for records. Chris extended his trips to the Salmon Arm area while Doug didn't let deep water of cattail beds discourage him from counting the eggs in **Ruddy Duck** nests.

Linda has also mentored others including **Cyril Colonel** who this year sent in a personal best of 91 cards from the Creston Valley. In addition, he compiles information for Linda on all bird sightings for the Creston database she has developed to write a book.

**Aldo Cogrossi**, despite a busy tourist season at his **Ruby Lake Resort** on the Sunshine Coast, submitted an impressive 54 cards for his first year as a participant.

He has erected many nest boxes on his sanctuary and each year he carefully follows the success of his **Wood Duck** families.

We are again grateful to **Hilary Gordon** who has maintained her enthusiasm in the co-ordination of information coming in from the **Shuswap Lake** region and **Revelstoke**. **Glenn Ryder** again spent the autumn period transferring historical records from small notebooks, dating back to **1943**, to 8 ½" x 11" lined sheets (and cards) for use in the WBT Wildlife Data Centre.



*Tree Swallow entering one of many nestboxes along a monitored trail. Photo: R. Wayne Campbell*

**Orville Gordon** started monitoring **Tree Swallow** nest boxes in the **Revelstoke** area but was soon called out-of-town for work. The task was not completed but he still had the foresight to send in the data he had gathered. It contained useful information on occupancy, egg dates, and other nest details. Other nest box trails were monitored carefully by **Gary Lelliott** (*Castlegar-Ootischenia* area), **Beverly H. Butcher** (102 boxes in the *Cariboo*), **Clifford Day** (*Vernon*), **Hylda Mayfield** (northern *Okanagan Valley*), **Vi** and **John Lambie** (*Mackenzie*), **Rita Wege** and **Larry Prosser** (*West Kootenay*), **Vic** and **Cecile Cousineau** (*Creston*), and **Dirk Rinehart-Pidcock** (*Kaslo*).

**Vicky Atkins** started getting prepared in February for the approaching nesting season by requesting colony cards for her **Eared Grebes**. **Laurie Rockwell** continued

his personal research program with breeding **Gray Flycatchers** and **Ed and Monica Dahl** surveyed **Barn Owls**. **Janice Arndt** followed six **Rock Dove** nests from eggs to fledging, a species that most people ignore. **Jimm Ginns** also added to that total this year. Again, **Emilee Fanjoy, Elaine Moore, Rita Wege, Larry Prosser, Cyril Colonel,** and **Linda Van Damme** monitored **Osprey** nests in the **West Kootenay**.

**Eva Durrance** carried her nest-finding skills into the alpine areas of **Cathedral Park** and recorded breeding for little-known species such as **Clark's Nutcracker, Three-toed Woodpecker, Mountain Chickadee,** and **Black-backed Woodpecker**. **Ed Beynon** also visited alpine areas, in the **West Kootenay**, where he found nesting **White-tailed Ptarmigan** and **American Pipit**. He also suspected that **Golden-crowned Sparrows** were breeding.

Rarely do people make an effort to carefully search, check, and record information on individual nests of colonial marsh-nesting species. This year, **Allen Poynter** provided a detailed diagram for a colony of 42 **Red-winged Blackbirds** nesting in a marsh on Vancouver Island and personally checked each nest.

This year, **Geoffrey Barnard** decided to solicit help with locating and monitoring nests around **Swan Lake** near Victoria. The results were impressive both in quantity and quality of information.

## Quality of Information

### *Filling in the Blanks*

The new nest cards appear to have been accepted although some people mentioned they needed more space under REMARKS but appreciated more space on the back of the card for additional information. We have purposely limited space to write on the front side of the card as it makes data entry more efficient.

Please print or write legibly in the spaces and use dark ink, not pencil. The 4-letter code (see WBT Wild Bird Trust of B. C. Wildlife Report No. 2 – Common and Scientific Names, Sequence and 4-Letter Codes) can be used for species names and subspecies (e.g., “**Oregon**” **Junco** = **ORJU** or “**Slate-coloured**” **Junco** = **SCJU** for **Dark-eyed Junco**). For example, **Ed Beynon** consistently added subspecies codes to each of his cards. The full name of each participant should be included in the “Observer” box. For multiple people, add names in the space above the box. To save time some contributors are using rubber stamps and address labels.

More people spent time filling in precise details for habitats (**Chris Charlesworth, Doug Brown, Linda Van Damme, Laurie Rockwell, Todd Heakes, Billie Gowans, Laird Law, Sandra Kinsey, Rita Wege, Larry Prosser, Michael I. Preston, Jim Patterson,** and **Eva Durrance**), elevation (**Emily Muller, Todd Heakes, Sandra Kinsey,** and **Laird Law**), codes for specific nest locations (**Chris Charlesworth, Jim Patterson** and **Laurie Rockwell**), detailed REMARKS (**Jennifer Bergen** and **F. Don**

**Young**), and nest material identification for individual species (**Glenn R. Ryder**).

Whenever possible, please try to describe the stage of development of nestlings (e.g., eyes closed, naked young, some down on head, pin feathers, etc.) or the estimated age of downy young (especially waterfowl) referring to stages of development shown in Appendix 1.

### *Prints and Diagrams*

Sketches of nest locations (especially cliff-nesting raptors and colonial-nesting species), nest placement, unusual events, and chick abnormalities are useful and can be added to the “Additional Information” section of the card. **Glenn R. Ryder** consistently makes drawings in the field that show an area with many of the specific locations for each nest.

Many people attached coloured prints to their cards, some of which have been included in this report. These included **Lorri Harpur, Lloyd Atkins** (Great Horned Owl), **Janice Arndt** (Wilson's Phalarope eggs), **Morgan Anderson, P. Ray Williams** (Common Nighthawk chicks), and **Glenn R. Ryder**.



*Justin and Bethany Arndt and friend being shown a Wilson's Phalarope nest with eggs at Tunkwa Park, Photo: Janice Arndt.*

### *Repeat Visits*

This was the season of repeat visits. The most complete set of data for one area was carried out on the Sunshine Coast by field researchers **Glenn Ryder, Linda Van Damme, Doug Brown, Chris Charlesworth,** and **Wayne Campbell**. Over 250 nests were monitored from late May through early July with outcomes determined for little known species such as **MacGillivray's Warbler, Willow Flycatcher, Spotted Towhee, Black-headed Grosbeak,** and **Cedar Waxwing**.

**Harold C. Craven** reported most visits to a nest. He regularly watched a pair of **Cooper's Hawks** raise their family and after **22 visits** he was rewarded by witnessing 2

young leave the nest. **Tunie Grant** had to staple 5 nest cards together to record her 21 visits to a **Bald Eagle** nest! **Waterbirds**, like loons, grebes, and coots received more attention than usual thanks to follow-up visits to lakes and wetlands by **Alice Beals, Willie Haras, Janice Arndt, Linda Van Damme, and Chris Charlesworth.**

The monitoring program to track the outcome of **Osprey** nests continued this year with major efforts to document details of each visit provided by **Emilee Fanjoy, Elaine Moore, Rita Wege, Larry Prosser, and Tunie Grant** who actually made 17 visits to one nest!

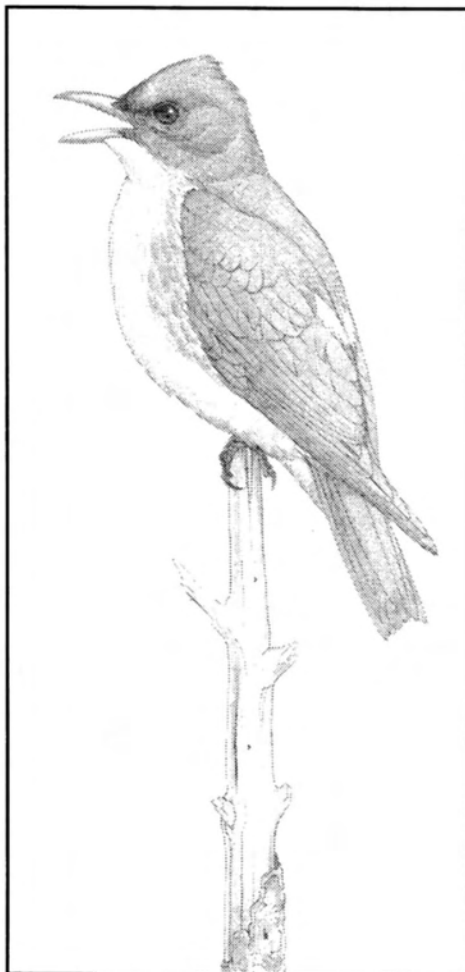
Others who took the time to visit nests repeatedly included **Willie Haras, Tunie Grant, Gary & Sharon Lelliott, Jim Ginns, P. Ray Williams, Clifford Day, Emily Muller, Barbara Sedgwick, F. Don Young, Len & Molly Donaldson, Alf Atkins, Geoffrey Barnard, Lloyd Atkins, and Morgan Anderson.**

#### *Negative Information*

For some reason, probably human nature, we tend not to record things that we don't see or do not think that negative information is useful. For some species, especially those that occupy traditional nesting sites, such as swallows, raptors, owls, and waterbirds, documenting details of the nest site without actual nesting activity can be important.

**Ray Williams** reminded us of the need to record the presence of seabirds at nesting sites even though the actual nests could not be checked. He sent details of **Pigeon Guillemots** that have probably nested in the wharf pilings between **Esquimalt Lagoon** and **Albert Head** on southern Vancouver Island since at least 1993.

This year, the pair of **White-headed Woodpeckers** that nested in the southern **Okanagan Valley** could not be found but the pair outside the Valley moved to a new site, about 200 metres away, and raised one young. A traditional **Peregrine Falcon** aerie in the **Lower Mainland** that was active in 1994, inactive from 1995 through 2000, was again active in 2001. On **Vancouver Island**, a pair of **Barn Owls** that nested in a western redcedar snag for 7 consecutive years could not be found this year. Maybe they died of old age?



*Fewer than 15 nests with eggs have ever been discovered for the Olive-sided Flycatcher in British Columbia.*

*Artwork: Mark Nyhof*

#### **Notes From the Field**

Each year, nest-finders see and experience events that are rarely included on nest cards and seldom make it into electronic databases. Here are some of their wonderful stories:

#### Thanks a Lot!

On May 26, **Glenn Ryder** discovered a **Redhead** nest on a large pond near Kelowna containing 8 Redhead eggs and 4 **Ruddy Duck** eggs. The female Redhead incubated the 12 eggs and twenty-two days later the mixed family was seen swimming confidently in a long line following their "mother". The family remained together until June 23 when the 4 Ruddy Duck babies decided to abandon their surrogate family and opt to spend the rest of the summer with their own kind, a male and female Ruddy Duck.

#### A Mistake with a Happy Ending

**Rick Howie**, a habitat biologist with the B C Ministry of Land, Water and Air Protection in Kamloops, provided a great story concerning a conflict between humans and birds near Savona. He wrote: "Earlier this spring, the road maintenance contractor and B C Hydro cut down a snag. Usually they call me about these projects first, but not this time. They did not know that the snag was home to **Lewis's Woodpeckers** last year, and some local residents who had been watching the woodpeckers were upset at the loss. The residents phoned the contractor and he came out with a bucket truck and replaced the section of tree with the nest hole in it. He strapped and bolted it in place, although about 4 metres lower than the original. The Lewis's Woodpeckers returned and examined the new situation for about 2 weeks.

Then they decided everything was fine and they would move from the penthouse down to the 3<sup>rd</sup> floor so to speak. They moved into the cavity and have been nesting there all summer".

#### To Help or Not?

It is always a difficult decision to know what to do when you actually discover predation in progress. While enjoying the semi-desert landscape south of Penticton on June 3 **Andy Bezener** saw a **Vesper**



**Sparrow** attacking something near a clump of bunchgrass. It turned out to be a **Racer**, a common snake in the Okanagan Valley, with its face in a Vesper Sparrow nest. Andy wrote: "Our approach scared the Racer to cover (we couldn't see if it had eaten anything), but we found the empty nest and one nestling (eyes open fuzzy grey crown, feather shafts well-developed, a drop of blood at the corner of its bill), just outside the nest cup, attempting to hop away. Tough call...help the bird (by moving it, which I did) or help the snake (by leaving the bird at the nest)! After returning to the area 10 minutes later, a Racer was spotted near the empty nest. This Racer dashed for uphill cover".

#### A Tailless Wonder

**Nancy Mahony**, who recently completed her Ph.D. research on **Brewer's Sparrows** in the southern Okanagan Valley, sometimes assigned unique names to her favourite sparrows that could easily be identified. She called one bird "**Wonderboy**" because he had no tail feathers. Each year, for three consecutive summer seasons, this bird returned to his favourite nesting grounds (without a tail), attracted a mate, and successfully helped raise a family! You have to wonder how he managed to fly to and from his wintering grounds each year. Maybe he hopped?

#### Recycling Nests?

Most of us give little thought to nests during the cold snowy month of January, so it was of interest for **Linda Van Damme** to observe some nest activity in the **Creston Valley** this past winter. She watched an adult **Harris's Sparrow** standing in the tattered cup of a **Cedar Waxwing** nest behaving strangely. The bird jumped back and forth in typical sparrow fashion and pulled out strands of nesting material. It seemed to be searching for grass stems with tiny seed heads as it pulled these out to feed on them. Of course it could have been searching for insects that were not obvious from distant viewing. The Harris's Sparrow stayed in the nest for 30 minutes while another adult and 3 immatures foraged on catkins in a nearby birch tree.

#### Don't Blame Your Pets

If you have ever blamed your cats and dogs, or perhaps mice, for destroying your outdoor carpeting you may want to hold off on the punishment. While birding in the Grant Narrows region of **Pitt Meadow** in early June, **Brian Self** and his son watched a female **Bullock's Oriole** pulling threading from a carpet covering the outside deck of a building for nesting material. As Brian was quick to point out, "These birds don't miss too much do they?"

#### The Nick of Time

While walking through an abandoned field on July 10 near **Fanny Bay**, on Vancouver Island, a hiker discovered a single, dark-splotched egg lying on the ground. Concerned that the egg had been abandoned, she carefully picked it up, wrapped it in a warm cloth, and hastily drove it to **Mountaineer Avian Rescue** for care. As the egg was being identified as that of a **Killdeer** by rehabilitator Maj Birch, it began pipping and soon hatched. The chick was raised and three weeks later released to fend on its own.



*Hooded Mergansers may compete with woodpeckers, owls, ducks, and other cavity-nesting species for prime breeding sites. Photo: R. Wayne Campbell*

#### A Bird with a Brain

**Ray Peterson**, a police officer in downtown **Vancouver**, has now had first hand experience with the term "bird brain". While on his beat in mid-July, a female **Mallard** waddled up to him and tugged on his pant leg and began quacking. He thought the behaviour was "a bit goofy" so he gently shoved the bird away. The hen persisted and then, making sure she still had Ray's eye, laid down on a nearby storm sewer grate. She repeated the strange behaviour so Ray decided to walk up to her and soon discovered 8 ducklings in the water below. They had fallen down between the grates. Soon more policemen arrived and the Mallard ran around them and lay down on the grate again. Finally, a tow truck was called, the grate was removed, and eight ducklings were lifted one-by-one from the trap, and reunited with their mother. Everyone watched as the mother escorted her brood to the safety of the water in nearby False Creek.

#### Preparing Food for the Babies?

New nest-finder **Doug Brown** watched a pair of **Lewis's Woodpeckers** feeding young in a fire-killed trembling aspen in **Richter Pass**, west of Osoyoos, in

late July. While he was familiar with the woodpecker's fly-catching behaviour he was surprised to witness how they caught and prepared a meal for the "kids". Initially, he watched the birds catch insects by picking them off tree trunks and by fly-catching, an activity that required return visits to the young every 2-5 minutes. Then one parent caught a very large sheep moth (*Hemileuca eglanterinus*). The moth was repeatedly beaten on top of a snag and then on the side of the trunk for several minutes. Finally, the woodpecker gave up and fed the moth to its impatient offspring – wings and all!

#### Record and Report

Over 80% of all birds in British Columbia are protected by the federal **Migratory Birds Convention Act**, a joint agreement between Mexico, the United States, and Canada. Most of the remaining species are protected by the provincial **Wildlife Act**. If you see someone killing or unnecessarily disturbing birds please report the incident to the nearest federal or provincial enforcement office. Unfortunately, Mary Ann Kingsmill heard only second hand that **Common Loons** were being shot on a lake southeast of Vernon because the birds were disturbing "belly-boat" fishermen while fly-fishing.

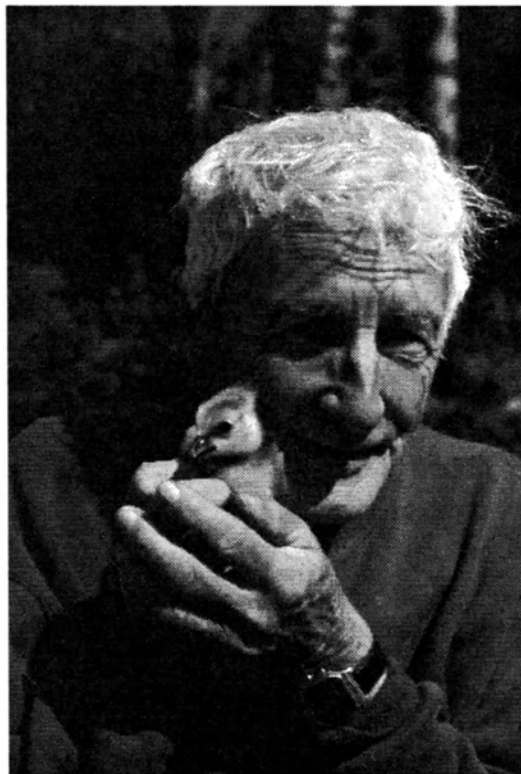
#### Old Passion Re-kindled

**Cyril Colonel** has been a farmer in the **Creston Valley** for over 30 years so he has seen the land through many seasons. But who's got time to watch birds with the long hours and the hard physical demands that working the land requires? It was when a **Great Horned Owl** nested in a hay shed that sparked his boyhood interest in nests again. He sees the land anew and now during the breeding season takes time to check out a **Barn Swallow** sitting in her nest on the rafter or the Say's Phoebe that claimed an old swallow nest as her own. The **Mallard** who laid her eggs too close to the idle equipment had to have her nest relocated so operations could continue. At first she flew away when Cyril arrived at work, but after a few days the hen would duck down then sit upright to "supervise" the activity, until the day she disappeared with her downy brood. From the tiny hatching **Killdeer** chick to the fuzzy **Canada Goose** gosling, Cyril has witnessed new life and the birds have opened doors to many exciting and challenging experiences. There is much he hopes to learn, and with an impressive 91 breeding records this season he is well on his way!

#### Determined to Succeed

While searching for breeding records around **Kilpoola Lake** in Richter Pass **Glenn Ryder** noticed an unusually large-looking nest on a horizontal branch of a mock orange shrub. Once closer he discovered three nests, one on top of the other. Being curious, he gently prodded each nest and discovered a single Brown-

headed Cowbird egg in the first two nests and 4 nestling **Dusky Flycatchers** in the top nest. It appeared that when the flycatcher had just completed each nest, a cowbird took the opportunity to lay an egg hoping that the host would incubate and raise its young. Each time, the flycatcher rebuilt an entirely new nest, and after three attempts was successful in discouraging the cowbird and fledging four of her own babies.



*Cyril Colonel, a farmer in the Creston Valley, with a Canada Goose gosling. Photo: Linda M. Van Damme*

#### Shared Living Space

**Manfred Roschitz**, who lives in Quesnel, noticed that a pair of **Hooded Mergansers** and **Northern Flickers** had similar interests in using cavities in the same tree for nesting. Since the nest site could not be climbed, Manfred had to visit the area and watch for activity. On the first visit he saw the female Hooded Merganser enter a cavity about 1.5 m below the flicker nest. The second and third time he saw both the male and female flying to the tree. The female entered the cavity and the male flew by, turned and headed towards a beaver pond about 120 metres to the north. On the third visit he also noticed telltale signs of down dangling from the edge of the cavity suggesting it was active. About 10 days later he saw the pair of mergansers and 6 downy ducklings swimming in the beaver pond. The flickers also fledged successfully.

### Nest Re-use?

Old nests should not be removed from trees because they may provide winter homes for small mammals, birds, amphibians, and insects. And the following summer birds may reuse the nests. **Janne Perrin** noted that a **Bullock's Oriole** reused a nest built last year (2000) in a big leaf maple in her back yard in Harrison Hot Springs. She says that last year the adults were very aggressive and drove off Northwestern Crows and Red-winged Blackbirds but this year (2001) they were very secretive. **Linda Van Damme** found that a pair of **Western Kingbirds** used the same nest in **Castlegar** for 8 years! Several people reported that **Barn Swallows**, **Mountain Bluebirds**, **Common Ravens**, **American Crows**, and **Black-billed Magpies** also used the same nest as in previous years.



*An adult Red-throated Loon incubates two eggs at Rooney Lake, 70 km north of Campbell River. Photo: Michael I. Preston*

### A Spring Ritual

In April of each year **Tunie Grant** is quick to notice the return of the **Killdeers** as they move into her horse pastures in **Grindrod**. In early May she scatters "stuff" around the pasture hoping the birds will find a safe spot to lay their eggs. Apparently it works as the horses make a detour around the debris leaving the incubating parent un-molested!

### A Dangerous Journey

While travelling Highway 1 east of Chilliwack on May 14 **Glenn Ryder's** faith in humanity was quickly restored. He noticed that trucks and cars were stopped along a flat stretch of freeway. Suspecting an accident he drove closer to have a look. He was pleasantly surprised to watch a hen **Mallard** escort her 11 ducklings across the freeway to the safety of a ditch on the other side. WOW!

### Eyes Bigger Than Stomach

While birdwatching in **Minnehada Park** in the Greater Vancouver Regional District on August 7 Mark Wynja came upon a gruesome sight. In a ditch he discovered a dead **Bullfrog** with a dead **Canada Goose** gosling halfway down its throat. Throughout the Lower Mainland, and parts of the Sunshine Coast, the Bullfrog is having a devastating impact on waterfowl reproduction success rates.

### Home Sweet Home

**Iris Franklin**, who lives in **Nelson**, again enjoyed a long season of her **robins** nesting above the main doorway of her home. She exclaimed "they have raised 16 young out of that nest this year!" Four clutches all with four eggs. It was the last lot to fledge that had Iris concerned as the male, which she described "as a cheery good father", suddenly disappeared. The female looked bedraggled, so Iris decided to help out. She dug worms from the garden and placed them on a saucer on her front step, so the female robin wouldn't have to work so hard to find food. A success, all four survived and left the nest. Iris waits with anticipation to see if next season her lady robin finds a new mate.

### Up Close and Personal

Finding the nests of any bird is rewarding but locating the nest of an uncommon species is thrilling. While spending an afternoon at **Rooney Lake**, about 70 km north of Campbell River, a fisherman from Gold River told **Michael** and **Joanna Preston** that a pair of **Red-throated Loons** were swimming back-and-forth at one end of the lake. After a brief search, they found a loon sitting at the end of a log about 40 m from shore. While slowly walking down a slope towards the site the adult slipped off the nest, revealing a single egg that could be seen with binoculars! On a revisit three days later the nest contained two eggs. The nest was monitored every three days or so and on one visit the adult would not leave the nest giving Michael a rare opportunity to photograph the incubating bird. Eventually, by the third week of July, two downy young left the nest site with their parents.

### Historical Information

Over 2,000 historical breeding records were transferred from field notebooks, letters, publications, reports, and e-mails dating from **1905** through **2000**. The top five years were **2000** - 862 cards, **1946** - 344 cards, **1975** - 143 cards, **1969** - 94 cards, and **1966** - 78 cards.

Next year we will start to search consulting reports and encourage birdwatchers around the province to go back into their personal notebooks and extract historical breeding information for the BCNRS.



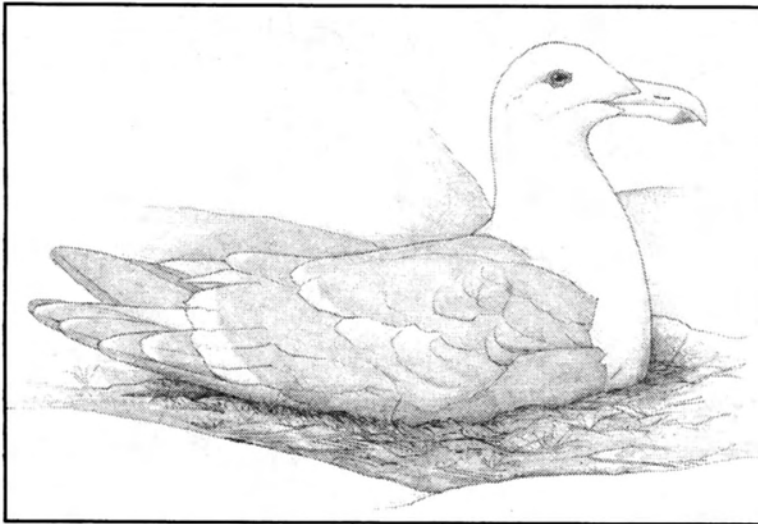
**List of Species with Total Breeding Records by Family**

**Family Gaviidae – Loons (59):** Red-throated Loon – 1 and Common Loon – 58.

**Family Podicipedidae – Grebes (191):** Pied-billed Grebe – 57, Horned Grebe – 12, Red-necked Grebe – 49, Eared Grebe – 25, Western Grebe – 47, and Clark's Grebe – 1.

**Family Phalacrocoracidae – Cormorants (1):** Double-crested Cormorant – 1.

**Family Ardeidae – Bitterns, Herons, Egrets, and Night-Herons (62):** American Bittern – 6, Great Blue Heron – 53, and Green Heron – 3.



*Although the Glaucous-winged Gull is an abundant nesting species in the province, we receive very few nest cards each year. Artwork: Mark Nyhof.*

**Family Anatidae – Geese, Swans and Ducks (1,177):** Canada Goose – 514, Mute Swan – 5, Wood Duck – 65, Gadwall – 20, American Wigeon – 19, Mallard – 313, Blue-winged Teal – 8, Cinnamon Teal – 5, Northern Shoveler – 14, Northern Pintail – 4, Green-winged Teal – 13, Canvasback – 4, Redhead – 28, Ring-necked Duck – 9, Lesser Scaup – 4, Harlequin Duck – 2, Surf Scoter – 1, White-winged Scoter – 1, Bufflehead – 11, Common Goldeneye – 19, Barrow's Goldeneye – 23, Hooded Merganser – 17, Red-breasted Merganser – 1, Common Merganser – 41, and Ruddy Duck – 36.

**Family Accipitridae – Osprey, Kites, Eagles, Hawks and Allies (321):** Osprey – 182, Bald Eagle – 72, Northern Harrier – 14, Sharp-shinned Hawk – 3, Cooper's Hawk – 7, Northern Goshawk – 7, Swainson's Hawk – 5, Red-tailed Hawk – 30, and Golden Eagle – 1.

**Family Falconidae – Falcons (36):** American Kestrel – 18, Merlin – 16, Peregrine Falcon – 1, and Prairie Falcon – 1.

**Family Phasianidae – Partridges, Pheasant, Grouse, Ptarmigan and Turkey (119):** Chukar – 2, Gray Partridge – 2, Ring-necked Pheasant – 13, Ruffed Grouse – 37, Spruce Grouse – 11, Willow Ptarmigan – 1, White-tailed Ptarmigan – 17, Blue Grouse – 26, Sharp-tailed Grouse – 1, and Wild Turkey – 9.

**Family Odontophoridae – American Quail (37):** California Quail – 37.

**Family Rallidae – Rails, Gallinules and Coots (163):** Virginia Rail – 10, Sora – 12, and American Coot – 141.

**Family Gruidae – Cranes (7):** Sandhill Crane – 7.

**Family Charadriidae – Plovers (70):** Semipalmated Plover – 1 and Killdeer – 69.

**Family Haematopodidae – Oystercatchers (5):** Black Oystercatcher – 5.

**Family Recurvirostridae – Stilts and Avocets (11):** American Avocet – 11.

**Family Scolopacidae – Sandpipers, Phalaropes and Allies (84):** Greater Yellowlegs – 1, Wandering Tattler – 1, Spotted Sandpiper – 52, Long-billed Curlew – 4, Least Sandpiper – 1, Common Snipe – 17, and Wilson's Phalarope – 8.

**Family Laridae – Jaegers, Skuas, Gulls, Terns and Allies (1,343):** Mew Gull – 21, Ring-billed Gull – 1,019, California Gull – 271, Herring Gull – 13, Glaucous-winged Gull – 12, and Black Tern – 7.

**Family Alcidae – Auks, Murres and Puffins (4):** Common Murre – 1, Ancient Murrelet – 1, and Rhinoceros Auklet – 2.

**Family Columbidae – Pigeons and Doves (42):** Rock Dove – 26, Band-tailed Pigeon – 3, and Mourning Dove – 13.

**Family Tytonidae – Barn Owls (18):** Barn Owl – 18.

**Family Strigidae – Typical Owls (57):** Flammulated Owl – 3, Western Screech-Owl – 3, Great Horned Owl – 27, Northern Pygmy-Owl – 1, Barred Owl – 9, Long-eared Owl – 3, Short-eared Owl – 4, and Northern Saw-whet Owl – 7.

**Family Caprimulgidae – Goatsuckers (16):** Common Nighthawk – 13 and Common Poorwill – 3.

**Family Apodidae – Swifts (8):** Black Swift – 4, Vaux's Swift – 2, and White-throated Swift – 2.

**Family Trochilidae – Hummingbirds (29):** Black-chinned Hummingbird – 2, Anna's Hummingbird – 3, Calliope Hummingbird – 5, and Rufous Hummingbird – 19.

**Family Alcedinidae – Kingfishers (12):** Belted Kingfisher – 12.

**Family Picidae – Woodpeckers (163):** Lewis's Woodpecker – 21, Yellow-bellied Sapsucker – 1, Red-naped Sapsucker – 22, Red-breasted Sapsucker – 40, Williamson's Sapsucker – 4, Downy Woodpecker – 6, Hairy Woodpecker – 21, White-headed Woodpecker – 1, Three-toed Woodpecker – 4, Black-backed Woodpecker – 3, Northern Flicker – 36, and Pileated Woodpecker – 4.

**Family Tyrannidae – Tyrant Flycatchers (162):** Olive-sided Flycatcher – 2, Western Wood-Pewee – 8, Alder Flycatcher – 1, Willow Flycatcher – 27, Least Flycatcher – 4, Hammond's Flycatcher – 6, Gray Flycatcher – 5, Dusky Flycatcher – 16, Pacific-slope Flycatcher – 9, Eastern Phoebe – 1, Say's Phoebe – 12, Western Kingbird – 36, and Eastern Kingbird – 35.

**Family Vireonidae – Vireos (22):** Hutton's Vireo – 4, Warbling Vireo – 16, and Red-eyed Vireo – 2.

**Family Corvidae – Jays, Magpies and Crows (101):** Gray Jay – 21, Steller's Jay – 17, Clark's Nutcracker – 8, Black-billed Magpie – 12, American Crow – 15, Northwestern Crow – 7, and Common Raven – 21.

**Family Alaudidae – Larks (2):** Horned Lark – 2.

**Family Hirundinidae – Swallows (2,204):** Purple Martin – 2, Tree Swallow – 321, Violet-green Swallow – 45, Northern Rough-winged Swallow – 2, Bank Swallow – 11, Cliff Swallow – 1,729, and Barn Swallow – 94.

**Family Paridae – Chickadees (119):** Black-capped Chickadee – 39, Mountain Chickadee – 19, Chestnut-backed Chickadee – 60, and Boreal Chickadee – 1.

**Family Aegithalidae – Bushtit (23):** Bushtit – 23.

**Family Sittidae – Nuthatches (28):** Red-breasted Nuthatch – 15, White-breasted Nuthatch – 2, and Pygmy Nuthatch – 11.

**Family Certhiidae – Creeper (5):** Brown Creeper – 5.

**Family Troglodytidae – Wrens (62):** Bewick's Wren – 9, House Wren – 9, Winter Wren – 25, and Marsh Wren – 19.

**Family Cinclidae – Dipper (30):** American Dipper – 30.

**Family Regulidae – Kinglets (36):** Golden-crowned Kinglet – 32 and Ruby-crowned Kinglet – 4.

**Family Muscicapidae – Bluebirds, Thrushes and Allies (472):** Western Bluebird – 43, Mountain Bluebird – 91, Townsend's Solitaire – 6, Veery – 2, Swainson's Thrush – 19, Hermit Thrush – 8, American Robin – 291, and Varied Thrush – 12.

**Family Mimidae – Mockingbird, Thrashers and Allies (12):** Gray Catbird – 11 and Sage Thrasher – 1.

**Family Sturnidae – Starling and Allies (36):** European Starling – 35 and Crested Myna – 1.

**Family Motacillidae – Wagtails and Pipits (3):** American Pipit – 3.



*American Pipits are surprisingly difficult to find despite their placement in short alpine vegetation. Photo: Rick Marshall.*

**Family Bombycillidae – Waxwings (66):** Bohemian Waxwing – 1 and Cedar Waxwing – 65.

**Family Parulidae – Wood-Warblers (143):** Tennessee Warbler – 1, Orange-crowned Warbler – 20, Nashville Warbler – 3, Yellow Warbler – 54, Yellow-rumped Warbler – 16, Black-throated Gray Warbler – 1, Townsend's Warbler – 5, Bay-breasted Warbler – 1, Blackpoll Warbler – 2, American Redstart – 4, Northern Waterthrush – 2, MacGillivray's Warbler – 18, Common Yellowthroat – 12, Wilson's Warbler – 3, and Yellow-breasted Chat – 1.

**Family Thraupidae – Tanagers (13):** Western Tanager – 13.

**Family Cardinalidae – Cardinals, Grosbeaks and Allies (36):** Rose-breasted Grosbeak – 1, Black-headed Grosbeak – 28, and Lazuli Bunting – 7.

**Family Emberizidae – Towhees, Sparrows, Longspurs and Allies (260):** Spotted Towhee – 50, American Tree Sparrow – 1, Chipping Sparrow – 24, Clay-colored Sparrow – 1, Brewer's Sparrow – 1, Vesper Sparrow – 3, Savannah Sparrow – 2, LeConte's Sparrow – 2, Nelson's Sharp-tailed Sparrow – 3, Fox Sparrow – 3, Song Sparrow – 47, Lincoln's Sparrow – 11, Swamp Sparrow – 1, White-throated Sparrow – 1, White-crowned Sparrow – 33, Golden-crowned Sparrow – 6, and Dark-eyed Junco – 71.

**Family Icteridae – Blackbirds, Orioles and Allies (202):** Red-winged Blackbird – 87, Western Meadowlark – 1, Yellow-headed Blackbird – 19, Brewer's Blackbird – 19, Brown-headed Cowbird – 44, Baltimore Oriole – 1, and Bullock's Oriole – 31.

**Family Fringillidae – Cardueline Finches and Allies (55):** Gray-crowned Rosy-Finch – 1, Purple Finch – 6, Cassin's Finch – 8, House Finch – 15, Red Crossbill – 4, Pine Siskin – 12, and American Goldfinch – 9.

**Family Passeridae – Old World Sparrows (18):** House Sparrow – 18.

**Total nests/broods – 8,145.**

*(2001 season – 6,122; historical 2,023)*

**Total species – 232.**



*In 2000 only 4 nests of the Northern Harrier were reported. This year, 14 were found.  
Photo: R. Wayne Campbell*

**Willow Flycatcher**  
LeBlanc Lake

July 4, 2001

July 17, 2001

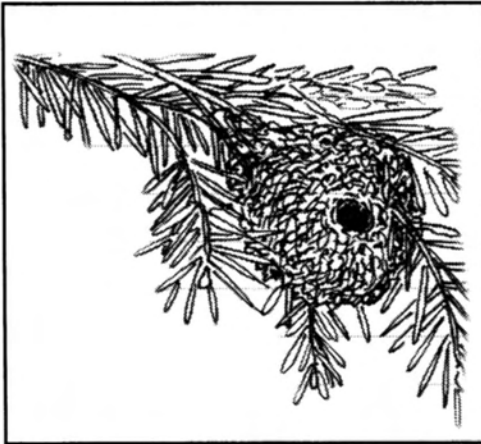
*Donna-Rae Williams produced this photographic composite of the chronology of a Willow Flycatcher nest in the Cariboo-Chilcotin region as an education aid.*



## List of Active and Historical (\*) Contributors in Alphabetical Order

**A** Elizabeth Abbott - 1, E. M. Anderson - 1\*, Morgan Anderson - 31, T. & G. Anderson - 1, Janice E. Arndt - 40, Vicky Atkins & Alice Beals - 57, Ald Atkins - 2, Lloyd Atkins - 3, and Vicky Atkins - 138.

**B** John Backland - 1\*, Bona Baillie and J. Janne Perrin - 1, Steve Baillie - 9, Geoffrey Barnard - 12, Daniel Bastaja - 2, Helen Bavin and Joyce Hutchison - 4, Vivian and Ron Beal - 3, Alice Beals - 41, Marc-Andre Beaucher - 1, Suzanne Beauchesne and Stephen Bennett - 2, Barbara Begg - 15, Stephen Bennett, Pete Corbett and John Addison - 1, Stephen Bennett - 5, Jennifer Bergen and F. Don Young - 7, Ed Beynon - 91, Andy Bezener - 1, Mary J. Birch - 66, Peter Blökker - 2, Jeff Bodman - 2, Jack Bowling - 28, Kenneth C. Boyce - 1\*, Allan Brooks - 8\*, Doug Brown - 73, Jennifer Brownlow - 1, Tony Buckle - 1, Roger Burrows - 3, Dave Bush - 1\*, and Beverly H. Butcher - 91.



*Typical location of a Winter Wren nest, at the end of a conifer branch, in temperate raincoast forests. Sketch: Glenn R. Ryder*

**C** Giff Calvert - 1, Lucile M. Campbell - 78, R. Wayne Campbell - 848 (current and Historical), R. Wayne Campbell and Brian J. Petrar - 1\*, Michelle Cannons - 1, Hazel Cannings - 1, Margaret Cannings - 1\*, Steve R. Cannings - 26\*, Steve R. and Jean M. Cannings - 12\*, W. Caspell - 11, Donald G. Cecile - 317, Chris Charlesworth - 280, Myke J. Chutter - 1\*, Aldo Cogrossi - 54, Cyril Colonel - 91, John M. Cooper - 80, John M. Cooper and Suzanne Beauchesne - 14, John M., Jocelyn and Adrian Cooper - 1, Evi Coulson - 1, Evi and Mel Coulson - 6, Eric Counsell - 2, Vic and Cecile Cousineau - 31, Larry Cowan - 4, and Harold C. Craven - 4.

**D** Ed Dahl - 2, Ed and Monika Dahl - 18, Ed and Monika Dahl and John and Yvette Brett - 1, Ed Dahl and Dan Evans - 1, Ed Dahl and Jack Rutledge - 1, Ed and Monika Dahl and Frank Strong - 1, Albert R. Davidson - 3\*, Eleanor and Albert R. Davidson - 1\*, Gary S. Davidson - 4, Cliff Day - 16, Raymond A. Demarchi - 1\*, Len and Molly Donaldson - 10, Arian Dorst - 1, Gordon Dowker - 5, and Eva Durance - 55.

**E** R. Yorke Edwards - 1\*, Gary Elliott - 35, Gladys Elliott - 3, Kyle E. Elliott - 1, P. Elliott - 14, Maurice Ellison - 11\*, Hanna and Ken Emes - 2, and Anthony J. Erskine - 1\*.

**F** Emilee Fanjoy - 4, Emilee Fanjoy and Elaine Moore - 14, Robert Ferguson - 2, D. Finnestad - 1, D. Ross Fisher - 1, J. Fitz-Gibbon - 1\*, Lorraine Fontaine - 1, Trevor Forder - 1, J. Bristol Foster - 2, Lee Foster - 17, and David F. Fraser - 2\*.

**G** Gordon Gadsen - 20, Sarah Gallashan - 1, Jeff Gaskin - 7\*, Bryan R. Gates - 1\*, Calvin Gehlen - 8, Phil Gehlen - 3, Richard E. Gibbs - 1, Jim Ginns - 86, Betty Goodman - 1, Betty and Jim Goodman - 1, J. E. Victor Goodwill - 1, J. E. Victor and Margaret Goodwill - 2, Hilary Gordon - 46, Hilary and Orville Gordon - 12, Hilary Gordon and Peter Jannink - 1, Hilary Gordon, Ted Hillary and Peter Jannink - 1, Hilary Gordon and Orville Gordon and Ted Jannink - 2, Orville Gordon - 100, Billie Gowans and Todd Heakes - 5, James Grant - 3\*, Tunie Grant - 5, Tunie and Doug Grant - 2, Margaret Greene - 1, Tony Greenfield - 11, Charles J. Guiguet - 7\*, and Les Gyug - 7.

**H** E. Haan - 1, J. Hansen - 2, Barbara Hanwell - 2, Willie Haras - 30, Jack Harper and Geoffrey Barnard - 4, Lorri Harpur - 12, Robert B. Hay - 1\*, Wendy Hayduk - 2, Todd Heakes - 6, Todd Heakes and Billie Gowans - 2, Todd Heakes and Nancy Krueger - 1, Christine Hedgecock - 3, Ruth Hellevang - 4, Edward G. Hennan - 5\*, Simon Henson - 2, R. Jerry



Herzig – 14\*, Werner and Hilde Hesse – 1\*, Edward (Ted) Hillary – 2, Richard and Carol Hoar – 1\*, Madge Hollington – 22, Tracy and Carl Hooch-Antink – 2, Frank S. Hovenden – 1, and Richard R. Howie – 5.

**I** Doug Innes – 4, Doug Innes and Ian Woodasen – 1, Doug Innes, Bob Ramshaw and R. Wayne Campbell – 1, Marion Innes – 2, and John Ireland – 2.

**J** Burl Jantzen – 1, Burl Jantzen and Geoffrey Barnard – 3, Pat Janzen – 29, Len Jellicoe – 1, Anne M. N. Jones – 8, Robert Jones – 133, and Robin Jones – 1.

**K** Gary W. Kaiser – 20\*, Ken Kennedy – 701\*, Mary Ann Kingsmill – 6, Sandra Kinsey – 1, Ken Klimko – 2, and Anne Knowles.

**L** Elsie Lafreniere – 2, Hamilton M. Laing – 1\*, David, Vi, John and Melanie Lambie – 1, David, Vi and John Lambie – 1, Vi Lambie – 3, Vi and John Lambie – 43, Kate Lansley – 1, Jim Lawrence – 1, Laird Law – 18, Laird Law and Sandra Kinsey – 18, Gary Lelliott – 40, Gary and Sharon Lelliott – 6, Enid Lemon – 1, Pat Levitt – 7, R. Lincoln – 91, Sherry Linn – 3, and Robert E. Luscher – 3\*.

**M** George MacKay – 1, Jo Ann and Hue Mackenzie – 9, Jack V. Mackill – 25\*, Jack Mackill and Raymond A. Demarchi – 2\*, Alan L. MacLeod – 2\*, Nancy Mahony – 1, Diana V. Maloff – 29, Norman Marcus – 1, Rick Marshall – 1, Derek Marven – 1, April L. Maurer – 1, A. Mayfield – 22, Peter and Bernadette McCallister – 1, Barb and Mike McGrenere – 4\*, N. and A. Morgan – 1, A. McInnis – 2, R. McKelvey – 1\*, Bruce McLaughlan – 1, Ed McMackin – 8, Michael McMann – 22, Martin K. McNicholl – 1, Bruce McTavish – 1, J. R. McVeigh – 1, B. and M. Meiklejohn – 1, William J. Merilees – 7\*, Arthur L. Meugens – 1\*, Gail Mitchell – 63, Erica Moneger – 1, Guy L. Monty – 1, Elaine Moore – 3, Norma J. Morton – 1, Alexander Muir – 14, Emily Müller – 23, Naomi and Nerida Muller – 1, David A. Munro – 3\*, James A. Munro – 9\* and Robert Byers – 71.

**N** Eve J. Neale – 15, Laurie Neish – 14, Murray and Katherine Newman – 1, Gwen Nicol – 7, Gwen Nicol and June Slocombe – 5, K. Nomme – 7, Andrea Norris and Wes Pederson – 3, Edward L. Nygren – 1\*, Mark Nyhof – 171, Mark Nyhof and Bob Houston – 1, Mark Nyhof and Andrea Norris – 181.

**O** Viveka Ohman – 1, Michael Oliver – 44, Darren Olsen – 91, Brent Olsen – 1\*, Stan Olson – 2, Sarah O'Neill – 119, Michael Openshaw – 2, Ted Osmond-Jones – 1\*, Kristina Ovaska – 1, and Naomi Owens and Suzanne Beauchesne.

**P** Roger Packham – 2, Myrna Palmiere – 2, Gerrie Patterson – 1, Jim Patterson – 10, Carlo Pavan – 1, Burt Pelham – 1, J. Janne Perrin – 34, J. Janne Perrin and Ian Bladen – 1, J. Peters – 1, Brian J. Petrar – 4\*, Klaus Ploeger – 1, Sue Port – 4, G. Allen Poynter – 56, Heather Pratt – 1, Michael I. Preston – 18, Michael I. Preston and R. Wayne Campbell – 3, Michael I. Preston and Mark Nyhof – 1, Michael I. Preston and Steve Ogle – 5, Michael I. and Joanna Preston – 62, and Glen Price – 86.

**R** Phil Ranson – 1, Sandy Rathbone – 1\*, Trish Reid – 2, John Reynolds – 1, Sheila Reynolds – 6, Louise Rice – 1, Gillian and Trevor Richardson – 1, Dirk Rinehart-Pidcock – 45, Ralph W. Ritcey – 4\*, Rene Rivard – 5, Leila G. Roberts – 23\*, Leila G. Roberts and Margaret E. Goodwill – 1\*, Syd Roberts – 2, I. Laurie Rockwell – 24, Manfred Roschitz – 18, Rand Rutland – 4, and Glen R. Ryder – 778 (current and historical).



*The elusive Great Gray Owl is rarely reported nesting. Sketch: Glenn R. Ryder*

**S** E. Sadler and Geoffrey Barnard – 13, Kirk Safford – 2, Karel Sars – 1\*, Ron Satterfield – 8, Ron Satterfield and J. E. Victor Goodwill – 5, Ron and Joy Satterfield – 25, Gerri Schuler and Sheila Reynolds – 1, Brandin Schultz – 2, Lorraine Scott – 3, Susan Scott – 1, Barbara M. Sedgwick – 9, Barbara M. and Don W. Sedgwick – 1, Brain G. Self – 4\*, Selkirk College – 1, S. Sexton – 1, Michael G. Shepard – 2\*,

Michael G. Shepard and Teresa E. Shepard – 1\*, Teresa E. Shepard – 2\*, Katherine Shewchuk – 4, Chris Siddle – 1, Chris Siddle and Pearl Morgenstern – 1, Ed Silkens – 2, F. H. Simpson – 23, Jim Simms – 1, George P. Sirk – 3, G. Smith – 1, George Smith – 1, Pat Smith – 2, Win Speechly – 1\*, Prue and Bernie Spitman – 3, William Spreadborough – 1\*, H. A. Stelfox – 2\*, Andrew C. Stewart – 2, David Stirling – 1, Hazel and Jim Street – 37\*, Brian G. Stushnoff – 14\*, Ken Suedden – 1, Richard Swanston – 2, and Harry S. Swarth – 15\*.

**T** Ian Tanner – 212, Jeremy B. Tatum\* – 1, Bruce Taylor – 54, William Thornton – 36, Rick Toochin and Patrick Sullivan – 1\*, and Roger Tremblay – 18.

**V** Linda M. Van Damme – 751, Linda M. Van Damme, Jim Lawrence, and Gordon Brown – 1, Debbie Verholle – 2, John Vooyo – 2, and John Vooyo and Trevor Forder – 1.

**W** Wayne C. Weber – 25, Rita Wege – 21, Rita Wege and Larry Prosser – 76, Valerie Weld – 1, Bruce Whittington – 3\*, Eldred Williams – 7, Kerry Williams – 1, P. Ray Williams – 25, Jim Wilson – 1, Michael Wolfe – 1, Marcus Womersley – 14, Kenneth G. Wright – 3, and Mark Wynja – 2.

**Total Contributors – 353.**

**(Active – 288 ; Historical - 65)**

## **USE OF THE B. C. NEST RECORD SCHEME AND DATA BASES IN 2001**

### **Requests for Information**

The demand for current information on mammals, birds, reptiles, and amphibians in British Columbia is rapidly becoming an overwhelming chore that is presently being fitted into already busy schedules by people associated with the **WBT Wildlife Data Centre**. The task of fulfilling these requests, that includes communication by telephone, hand-written correspondence, facsimiles, and e-mail, as well as locating, compiling, copying, and sending material, has developed into a full-time job. The challenge in 2002 will be to develop an infrastructure that can efficiently handle the volume of requests but still maintain the integrity of the databases and their supporters.

In 2001, the **Data Centre** received about nine requests for information each day. Some of these could be attended to quickly while many were unrealistic and required many days, or weeks, to fulfil. One group, from Washington State, wanted a copy of all of the databases!

More requests were fulfilled in 2001 than in previous years but thousands of people had to complete

their research using other sources. Our highest priority was to supporters and contributors to the **Centre** followed by others who had projects in British Columbia that we felt were significant. Very few foreign requests were fulfilled.

The following list is only a partial summary of the name, affiliation or residence, and species or topic that we were able to respond to this year.

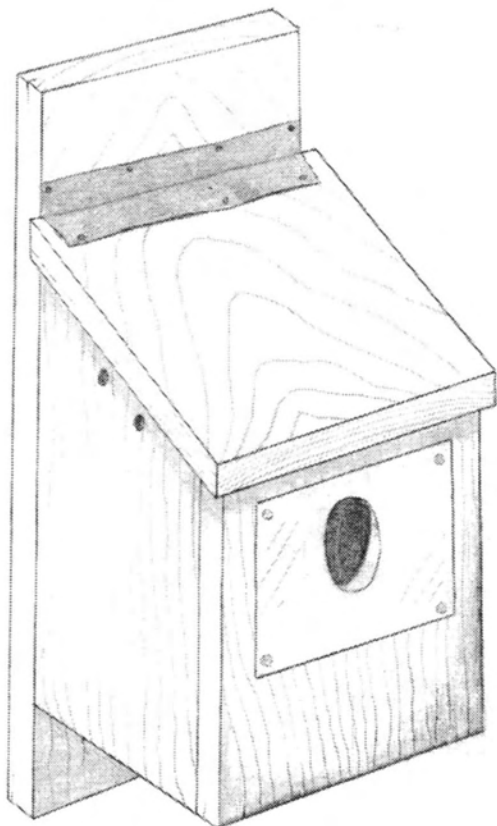
**Ron Alexander** (*Vancouver* – marine birds), **Bud Anderson** (*Washington Game Department, Seattle, WA* – Merlin and Peregrine Falcon), **Dennis Anderson** (*Nanaimo* – wildlife database), **Errol Anderson** (*White Rock* – Indigo Bunting), **Joyce Anderson** (*Burnaby* – owls), **Morgan Anderson** (*Nelson* – letter of recommendation), **Janice Arndt** (*Nelson* – Forster's Tern, Long-billed Curlew, Lincoln's Sparrow, MacGillivray's Warbler, Common Yellowthroat, Yellow-rumped Warbler, and Dark-eyed Junco), and **Vicky Atkins** (*Vernon* – Eared Grebe).

**Megan Bailey** (*Cloverdale* – cats and birds), **Tom Bailey** (*B C Hydro, Surrey* – wildlife lecture), **Dean Bassett** (*Cranbrook* – Trumpeter Swan), **Dr. Barbara Beasley** (*Long Beach Model Forest, Ucluelet* – summer bird surveys), **Michael Becker** (*North Shores News, North Vancouver* – B C checklist), **Ian Bennett** (*Port Hardy* – Marbled Murrelet), **Margaret Benning** (*Toronto, ON* – Gray-tailed Tattler), **Steve Bennett** (*Castlegar* – Rock Wren, Canyon Wren, House Wren, Bewick's Wren, Tennessee Warbler, Chestnut-sided Warbler, Black-and-white Warbler, Magnolia Warbler, American Redstart, and Ovenbird), **Jeff Bernard** (*Victoria* – Bushtit), **Mary Birch** (*Courtenay* – nesting birds), **Nathan Bodnar** (*University of Victoria, Victoria* – Red Crossbill), **Mary Boyd** (*Saanich* – California Quail), **Robert M. Bradley** (*B C Hydro, Burnaby* – woodpeckers and wildlife lecture), **Jan Bradshaw** (*Celista* – Shuswap birds), **Ray Bowker** (*Nanaimo* – jaegers), **Genevieve Boyer** (*Edmonton, AB* – Vancouver birds), **Tom Brighthouse** (*Salmon Arm* – waterbirds), **Gary Brown** (*Prince George* – Sandhill Crane), **Dr. Fred L. Bunnell** (*Centre for Applied Conservation Biology, UBC* – Rocky Mountain Tailed Frog, Northern Goshawk, rare and endangered species, lists of vertebrates for Vancouver Island, Sunshine coast, mainland coast, Queen Charlotte Islands and Peace River region), **Clyde Burton** (*Powell River* – Bullfrog and Merlin), and **Don Butler** (*Mission* – cougar).

**Christy Campbell** (*Delta* – wildlife lecture), **Eileen C. Campbell** (*Gordon Head Elementary School, Saanich* – owls), **Jordan Campbell** (*Vancouver* – Spotted Owl, Marbled Murrelet, and Bald Eagle), **Dannie Carson** (*Victoria* – wildlife images), **Harry R. Carter** (*U. S. Geological Survey, CA* – Triangle Island seabirds), **Wayne Carter** (*Surrey* – feeding birds), **Chris Charlesworth** (*Kelowna* – Chestnut-sided Warbler), **Katie Christie** (*University of Victoria, Saanich* – mainland coast birds), **Myke Chutter** (*B C Ministry of Water, Land and Air Protection, Victoria* – Painted Bunting), **Peter Clarkson**



(*Pacific Rim National Park, Ucluelet* – Black Oystercatcher), **Pat Calyton-Browne** (*B C Ministry of Water, Land and Air Protection, Campbell River* – owls), **Ann Clemente** (*Pender Harbour* – wildlife lecture), **Dan Coleman** (*Courtenay* – swallows), **Stan Coleman** (*Weyerhaeuser, Nanaimo* – Northern Goshawk), **Bill Collard** (*Vancouver* – muskrats), **Ted Collins** (*Sooke* – Brown Pelican), **Cyril Colonel** (*Creston* – wildlife trees and gulls), **Aldo Cogrossi** (*Ruby Lake* – waterbirds, frogs, and salamanders), **John M. Cooper** (*Manning, Cooper, and Associates, Sidney* – owls), and **Jack Copeland** (*Victoria* – non-indigenous birds).



Nest box with metal plate to discourage predators and pests. Artwork: Mark Nyhof

**Gary S. Davidson** (*Nakusp* – letter of recommendation), **John Dawson** (*Vancouver* – Red-eared Slider), **Bev Day** (*Delta* – Golden Eagle), **Darcy Day** (*Surrey* – swallows), **Dennis Demarchi** (*Victoria* – Northern Elephant Seal), **W. Denver** (*Nanaimo* – Northern Goshawk and Peregrine Falcon), **Lyle Dick** (*Parks Canada, Vancouver* – mammals Queen Charlotte Islands), **Adrian Dorst** (*Tofino* – birds of the west coast of Vancouver Island, Pacific Golden-Plover, and Whip-poor-will), **Sara Dubois** (*University of British Columbia, Vancouver* – rehabilitated wildlife), and **Eva Durrance** (*Penticton* – breeding birds).

**Don Ellison** (*Fort Nelson* – Whooping Crane).

**Alison Fox** (*City of Richmond, Urban Development, Richmond* – raptor nests), and **Dianne Fulton** (*Vancouver* – B C wildlife and lecture).

**Leonard Geoffs** (*Victoria* – seagulls), **Elaine Goldberg** (*Prince George* – Say's Phoebe), **Elaine Graham** (*West Vancouver* – nesting birds), **Lynn Green** (*Prince Rupert* – Sandhill Crane), **Tony Greenfield** (*Sechelt* – Solitary Sandpiper, Marbled Godwit, Sanderling, Semipalmated Sandpiper, Baird's Sandpiper, Sharp-tailed Sandpiper, Stilt Sandpiper, Short-billed Dowitcher, Long-billed Dowitcher, California Gull, Herring Gull, Western Gull, Common Tern, Indigo Bunting), and **Robert Griffiths** (*Cranbrook* – Black Tern).

**Andrew Hagen** (*Sechelt* – Common Loon), **Robert Hall** (*Victoria* – hummingbirds), **D. Ray Halladay** (*Victoria* – wildlife lecture), **Larry Halverson** (*Kootenay National Park, Radium* – Whooper Swan), **Joe Hardy** (*Burnaby* – Great Blue Heron), **George Harper** (*Victoria* – meadowlarks), **Grant Hazelwood** (*Terrace* – White-tailed Ptarmigan, Gyrfalcon, and Short-eared Owl), **Lex Hedley** (*Vancouver* – Ring-necked Pheasant), **Joan Henderson** (*White Rock* – seagulls), **R. Henderson** (*Saanich* – Bewick's Wren), **Michael Henry** (*Clearwater* – breeding birds in BC and BC Nest Record Scheme), **Joan Hooper** (*Victoria* – hummingbirds), **Dennis Horwood** (*Kitimat* – American White Pelican, Brown Creeper, Northern Rough-winged Swallow, Violet-green Swallow, Bank Swallow, and Barn Swallow), **Rick Howie** (*B C Ministry of Water, Land and Air Protection, Kamloops* – Western Grebe), **Dave Huggard** (*Centre for Applied Conservation Biology, UBC* – Red Squirrel), **Mark Hume** (*National Post, Vancouver* – Common Loon), and **Neil Hunt** (*Osoyoos* – American White Pelican).

**William Ingram** (*Surrey* – Western Screech-Owl).

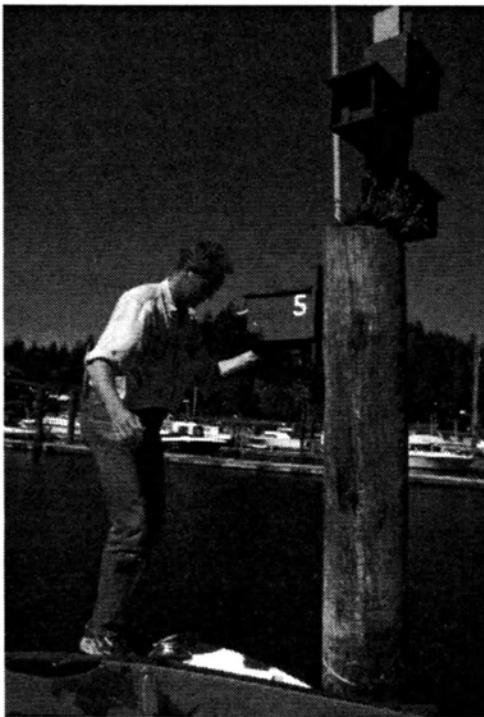
**Barry J. Janyk** (*Gibsons* – wildlife lecture), **Marlene Johnson** (*Whistler* – Gray Jay), **Kevin Johnson** (*West Vancouver* – Northern Pygmy-Owl), **W. Johnson** (*Nanaimo* – Crested Myna), **Bill Jones** (*Nanaimo* – American Bittern), and **Donna Jones** (*Calgary, AB* – B C birds and wildlife slides).

**Ken Kennedy** (*Langley* – Birds of B C), **Shane Kennedy** (*Edmonton, AB* – wildlife lecture), and **Jim and Gail Kirkpatrick** (*Victoria* – bird books and Pelican Island, SK).

**Gerald C. Langtry** (*Cloverdale* – Wandering Salamander, Eastern Gray Squirrel, Western Screech-Owl, Barred Owl, Hutton's Vireo, Brown Creeper, Black-throated Gray Warbler, and cavity-nesting species), **Douglas Leighton** (*Banff, AB* – Broad-winged Hawk and Bobolink), **Enid Lemon** (*Victoria* – Least Tern and

Golden-crowned Sparrow), and **John Linden** (*Vernon – Great Blue Heron*).

**Bruce MacDonald** (*Delta – Sandhill Crane*), **Dr. David A. Manuwal** (*University of Washington, Seattle – marine birds*), **Kathy Martin** (*Centre for Applied Conservation Biology, UBC – Gray-cheeked Thrush*), **Brent M. Matsuda** (*Department of Forest Sciences, UBC – Boreal Chorus Frog, Bull Frog, Columbia Spotted Frog, Great Basin Spadefoot Toad, Green Frog, Northern Leopard Frog, Oregon Spotted Frog, Pacific Treefrog, Red-legged Frog, Tailed Frog, Western Toad, Wood Frog, Coer d'Alene Salamander, Wandering Salamander, Ensatina, Long-toed Salamander, Northwestern Salamander, Pacific Giant Salamander, Rough-skinned Newt, Tiger Salamander, Western Red-backed Salamander, Northern Alligator Lizard, Western Skink, Common Garter Snake, Gopher Snake, Night Snake, Northwestern Garter Snake, Racer, Rubber Boa, Sharptail Snake, Western Rattlesnake, Western Terrestrial Garter Snake, Green Turtle, Leatherback, Painted Turtle, Red-eared Slider, Northern Goshawk, Sandhill Crane, and*



*Arnold Skei checking his Purple Martin nest boxes in Porpoise Bay on the Sunshine Coast.  
Photo: R. Wayne Campbell*

Short-eared Owl), **Rosemary Matthews** (*Victoria – California Quail*), **Ron Mayo** (*Bella Coola – Yellow-billed Cuckoo*), **Gracie McDonald** (*Sooke – Brown Pelican*), **Ryan McGregor** (*Sidney – Skylark*), **Ken McKenzie** (*Vernon – Great Blue Heron*), **Ronald T. McLaughlin** (*Nanaimo – Red-legged Frog, Bald Eagle, Northern Goshawk, Peregrine Falcon, and Merlin*), **Michael Mickleburgh** (*The Globe and Mail, Toronto, ON – Crested*

*Myna*), **William J. Merilees** (*Nanaimo – waterbird report*), **Don Mitchell** (*Williams Lake – turtles*), **Laura Moore** (*Prince George – cougars*), **Joyce Morris** (*Central Saanich – Barred Owl*), and **Julian Muirehead** (*Oliver – American White Pelican*).

**Joanna Neil** (*Williams Lake – American White Pelican*), **John Nelson** (*Cache Creek – Great Horned Owl*), **Megan Nelson** (*Abbotsford – Great Egret*), **Robert Neville** (*Fort St. John – Canada Goose and Short-eared Owl*), **Julie Newall** (*Nanaimo – Mount Arrowsmith wildlife*), **Ted Nordhagen** (*Westby, MO – Smith's Longspur*), and **Anita Nute** (*Victoria – birds of Victoria*).

**Joanne Outerbridge** (*Victoria – Green Heron and Eurasian Wigeon*), and **Ken Owens** (*B C Ministry of Water, Land and Air Protection, Williams Lake – Bald Eagle*).

**Sean Palmer** (*Prince Rupert – Bald Eagle*), **Al Peat** (*B C Ministry of Water, Land and Air Protection, Kamloops – Great Blue Heron and Northern Goshawk*), **Irene Phelan** (*Iris Communications, Vancouver – wildlife slides*), **John Phillips** (*Surrey – snakes*), **Rosamond Pojar** (*Smithers – Sandhill Crane and Great Egret*), **George Powell** (*Salmon Arm – Western Grebe*), **Doreen Powers** (*Vancouver – Barn Swallow*), **Michael I. Preston** (*Victoria – European Starling, Cedar Waxwing, White-crowned Sparrow, and Red Crossbill*), **Ruth Preston** (*Campbell River – Belted Kingfisher*), and **Wendy Price** (*Surrey – Western Screech-Owl*).

**Dr. Tom Reimchen** (*University of Victoria, Saanich – owl lecture*), **Charlie Renoe** (*Parksville – Northern Hawk Owl*), **John Reynolds** (*Abbotsford – Least Flycatcher*), **Kimberley Robbie** (*Victoria – owls*), **Ian Robertson** (*Langley – Fork-tailed Storm-Petrel*), **Amber Robinson** (*University of Victoria, Victoria – Red Crossbill*), **Ann Robinson** (*Langley – Opossum*), **Bill Robinson** (*Nakusp – owls*), **Teresa Rockenbirch** (*Pine Island – seabirds*), **Rene Roddick** (*B C Hydro, Surrey – cavity-nesting birds*), **David Roe** (*Calgary, AB – hawks*), **Sally Rothschild** (*Surrey – frogs*), and **Glenn R. Ryder** (*Aldergrove – Rubber Boa*).

**Joyce Sanderson** (*University of Victoria, Saanich – Spotted Owl*), **Jeff Scherer** (*B C Hydro, Sechelt – Wandering Salamander, Ring-necked Duck, Western Screech-Owl, Hutton's Vireo, Chestnut-sided Warbler, and Indigo Bunting*), **William C. Shuster** (*U S Department of Agriculture, Seward, AK – American Dipper*), **Bill Simpson** (*Princeton – Common Raven*), **Christine Scott** (*Courtenay – wildlife lecture*), **Jennifer Scott** (*West Vancouver – Steller's Jay*), **Arnold Skei** (*Sechelt – Purple Martin and Indigo Bunting*), **Anne Smith** (*Kamloops – Cattle Egret*), **Frank Smith** (*Comox – hummingbirds*), **Lennart Sopuck** (*Biolinx Environmental Research Ltd., Sidney – Birds of B C*), **Robert C. Stebbins** (*Museum of Vertebrate Zoology, Berkley, CA – distribution maps for 42*

species of amphibians and reptiles), **Tom Stevens** (Toronto, ON – House Wren), **Paul Stewart** (Delta – waterbirds Strait of Georgia), **David Stirling** (Victoria – Turkey Vulture), **Dean Stokes** (Cranbrook – Dickcissel), and **Steve Stupich** (Cassidy – Clark's Nutcracker).

**Margaret Taylor** (Vancouver – wildlife images), **W. Taylor** (Abbotsford – Bull Frog), **Nikki Temple** (University of Victoria, Saanich – coastal waterbirds), **Mark Thompson** (Peachland – raccoon), **Tom Todd** (Queen Charlotte City – Queen Charlotte birds), **Michael Tilitzky** (Raincoast Education Society, Tofino – wildlife in Tofino region), **Graham Turnbull** (B C Ministry of Water, Land and Air Protection, Nanaimo – Peregrine Falcon), and **Rod Tysdal** (Weyerhaeuser, Powell River – owls).

**Linda M. Van Damme** (Nelson – Pied-billed Grebe, Horned Grebe, Red-necked Grebe, Eared Grebe, Western Grebe, Clark's Grebe, Greater White-fronted Goose, Snow Goose, Canada Goose, Brant, Mute Swan, Trumpeter Swan, Wood Duck, Gadwall, Eurasian Wigeon, American Wigeon, American Black Duck, Mallard, Blue-winged Teal, Cinnamon Teal, Northern Shoveler, Northern Pintail, Green-winged Teal, Osprey, Bald Eagle, Sharp-shinned Hawk, Swainson's Hawk, Red-tailed Hawk, Rough-legged Hawk, American Kestrel, Peregrine Falcon, Chukar, Gray Partridge, Ring-necked Pheasant, Willow Ptarmigan, Rock Ptarmigan, White-tailed Ptarmigan, Blue Grouse, Sharp-tailed Grouse, California Quail, Virginia Rail, Sora, American Coot, Sandhill Crane, Black-necked Stilt, Forster's Tern, Rock Dove, Mourning Dove, Flammulated Owl, Western Screech-Owl, Great Horned Owl, Northern Hawk Owl, Spotted Owl, Barred Owl, Great Gray Owl, Long-eared Owl, Short-eared Owl, Boreal Owl, Northern Pygmy-Owl, Burrowing Owl, Northern Saw-whet Owl, Common Poorwill, Vaux's Swift, White-throated Swift, Black-chinned Hummingbird, Anna's Hummingbird, Calliope Hummingbird, Rufous Hummingbird, Belted Kingfisher, Yellow-breasted Sapsucker, Red-breasted Sapsucker, Williamson's Sapsucker, Downy Woodpecker, Hairy Woodpecker, White-headed Woodpecker, Three-toed Woodpecker, Black-backed Woodpecker, Northern Flicker, Say's Phoebe, Eastern Kingbird, Western Bluebird, Mountain Bluebird, Veery, Gray-cheeked Thrush, Swainson's Thrush, Hermit Thrush, Varied Thrush, Sage Thrasher, Northern Mockingbird, American Pipit, Sprague's Pipit, Gray Catbird, Bohemian Waxwing, Smith's Longspur, Snow Bunting, Lazuli Bunting, and Western Meadowlark).

**Alissa Watts** (Victoria – hummingbirds), **Dennis Weaver** (Powell River – Pine Siskin), **Valerie Welde** (Powell River – Anna's Hummingbird), **Andrew Williams** (Kamloops – Mountain Bluebird), **Janice Williams** (UBC Press, Vancouver – wildlife images), **Jim Wisnia** (Squamish – waterbirds and Bald Eagle), **John G. Woods** (Mount Revelstoke and Glacier National Parks, Revelstoke – Cape May Warbler), **Kathy Woods** (Vancouver – Great Blue Heron), and **Bill Wright** (Victoria – hummingbirds).

## Recent Publications and Reports

Information from the **WBT Wildlife Data Centre**, and its extensive databases, were acknowledged recently in the following scientific papers, books, reports, articles, and theses.

- Bunnell, F.L. and R.W. Campbell. 2001. The Not So Common Loon: Why and How We List Species... We Can Do Better. Research Paper Series from the Centre for Conservation and Applied Biology, University of British Columbia, Vancouver. 14 pages.
- Butler, R.W. Spring Waterbirds in the Queen Charlotte Islands. *Discovery* 29(2): 39-45.
- Campbell, R.W. 2001. WBT Wildlife Data Centre. WBT Wild Bird Trust of British Columbia, West Vancouver. Brochure.
- Campbell, R.W. and M.I. Preston. 2001. British Columbia Nest Record Scheme – 46<sup>th</sup> Annual Report – 2000 Nesting Season, WBT Wild Bird Trust of British Columbia Wildlife Report No. 7, West Vancouver. 26 pages.
- Campbell, R.W., R. Bovey and A. Bezener. 2001. Birds of Vancouver and the Lower Mainland. Lone Pine Publishing, Edmonton, Alberta. 160 pages.
- Campbell, R.W., N.K. Dawe, I. McT-Cowan, J.M. Cooper, G.W. Kaiser, A.C. Stewart, and M.C.E. McNall. 2001. The Birds of British Columbia: Volume 4 – Passerines (Wood-Warblers through Old World Sparrows. University of British Columbia Press, Vancouver. 739 pages.
- Campbell, R.W., B.M. Matsuda, D.M. Green, and P. Gregory. In press. Pocket Checklist of Amphibians and Reptiles of British Columbia. WBT Wild Bird Trust of British Columbia Special Publication No. 4, West Vancouver. Leaflet.
- Campbell, R.W., L.M. Van Damme, N.K. Dawe and S.R. Johnson. In press. British Columbia Birds – A Complete Checklist. WBT Wild Bird Trust of British Columbia Special Publication No. 3, West Vancouver. 54 pages.
- Cavitt, J.F. and C.A. Haas. 2000. Brown Thrasher (*Toxostoma rufum*). In The Birds of North America, No. 557 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 28 pages.



- Cooper, J.M. and S. Beauchesne. 2000. Inventory of Lewis's Woodpecker Population in the East Kootenay. British Columbia Ministry of Environment, Lands and Parks Wildlife Working Report No. WR-1000, Victoria. 30 pages.
- Cooper, J.M. and V. Stevens. 2000. A Review of the Ecology, Management and Conservation of the Northern Goshawk in British Columbia. British Columbia Ministry of Environment, Lands and Parks Wildlife Bulletin No. B-101, Victoria. 31 pages.
- Day, R.H., I.J. Stenhouse, and H.G. Gilchrist. 2001. Sabine's Gull (*Xema sabini*). In The Birds of North America, No. 593. (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 32 pages.
- Eadie, J.M., J.P.L. Savard, and M.L. Mallory. 2000. Barrow's Goldeneye (*Bucephala islandica*). In The Birds of North America, No. 548 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 32 pages.
- Eckerle, K.P. and C.F. Thompson. 2001. Yellow-breasted Chat (*Icteria virens*). In The Birds of North America, No. 575 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 28 pages.
- Forsyth, R.G. 2001. Re-identification of Terrestrial Slugs from Seabird Nesting Burrows off the West Coast of Vancouver Island. The Festivus 33(1): 9-10.
- Fredrickson, L.H. 2001. Steller's Eider (*Polysticta stelleri*). In The Birds of North America, No. 571 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 24 pages.
- Gardali, T. and G. Ballard. 2000. Warbling Vireo (*Vireo gilvus*) In The Birds of North America, No. 551 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 28 pages.
- Gebauer, M.B. and L.E. Moul. 2001. Status of the Great Blue Heron in British Columbia. British Columbia Ministry of Environment, Lands and Parks Wildlife Working Report No. WR-102, Victoria. 66 pages.
- Gilchrist, H.G. 2001. Glaucous Gull (*Larus hyperboreus*). In The Birds of North America, No. 573 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 32 pages.
- Gowans, B. and P. Ohanjanian. 2000. The American White Pelican (*Pelecanus erythrorhynchus*) in the Creston Valley Wildlife Management Area: Their Abundance, Distribution and Habitat Use. British Columbia Habitat Conservation Trust Fund Report, Victoria. 28 pages.
- Handel, C.M. and R.E. Gill. 2001. Black Turnstone (*Arenaria melanocephala*). In The Birds of North America, No. 585 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 28 pages.
- Harrington, B.A. 2001. Red Knot (*Calidris canutus*). In The Birds of North America, No. 563 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 32 pages.
- Helm, C. 2001. Tumbler Ridge – Enjoying its History, Trails and Wilderness. MCA Publishing, Tumbler Ridge, British Columbia. 370 pages.
- Hemphill, S.M., T.D. Hooper, and F.M. Njenga. 2001. Naturescape British Columbia: Resource Booklet - Central Interior. British Columbia Habitat Conservation Trust Fund, Victoria. 34 pages.
- Hemphill, S.M., T.D. Hooper, F.M. Njenga, K. Roberts, A. Roberts, and C. Guppy. 2001. Naturescape British Columbia: Native Plant and Animal Booklet - Central Interior. British Columbia Habitat Conservation Trust Fund, Victoria. 63 pages.
- Houston, C.S. and D.E. Brown. 2001. Upland Sandpiper (*Bartramia longicauda*). In The Birds of North America, No. 580 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, PA. 32 pages.
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## Rare and Sensitive Species

We received 33 requests for information on the specific breeding location for species with restricted breeding distributions. Some wanted to simply see the species and add it to their life list (e.g., **Prairie Falcon**, **White-headed Woodpecker**, **Yellow-breasted Chat**, **Sage Thrasher**, **Flammulated Owl**, and **Great Gray Owl**). Consultants requested site-specific information for peripheral species (e.g., **Baird's Sandpiper**, **Canada Warbler**, **Indigo Bunting**, and **Green Heron**) while several photographers wanted details for easily accessible breeding colonies of **Fork-tailed Storm-Petrel**, **Brandt's Cormorant**, **Cassin's Auklet**, **Tufted Puffin**, **Rhinoceros Auklet**, **Caspian Tern**, **California Gull**, and **Black-crowned Night-Heron**.

Government biologists, university professors, students, independent researchers, and serious amateur ornithologists also requested specific information for nesting birds in the province. Each request was handled

individually, keeping the welfare of the bird a first priority followed by the land ownership and sensitivity of the species to disturbance.

## Field Tips and Techniques

### Nest Finding Lasts all Year

When the green leaves of spring cloak the shrubs and trees, trying to find a nest can be challenging and time consuming. If you can't find a nest be sure to return to the area in winter. Without the leaves you may be surprised (and embarrassed) to learn where they were hidden.

Looking for nests in vegetation without foliage in winter can be very rewarding because by returning to the site in the following nesting season you may be lucky to find the birds have returned to exactly the same nest site. Many species of birds such as **Great Blue Heron**, **Red-tailed Hawk**, **Osprey**, **Black Swift**, **Belted Kingfisher**, **Western Kingbird**, **Cedar Waxwing**, and **American Robin** will re-use the same nest.



Locating old nests in winter may be a clue to species breeding in the area the following summer. Photo: Linda M. Van Damme.

### Beware the Ivy

When examining nests for materials take a few extra moments to identify the plants before handling them. Fortunately experienced naturalist **Glenn Ryder** was well aware that besides twigs, sticks, grasses, weed stems, leaves, and rootlets used in nests, the **Yellow-breasted Chat** and **Gray Catbird** often uses **poison ivy** leaves in building their nests. And often, poison ivy plants are subtly mixed in with other vegetation around the nest.

### Prey from Nest Sites

We can maximize our visit to the nests of some species of birds by collecting and/or identifying prey remains that may be in the nest or scattered about. For example, prey identified in 4 Northern Harrier nests included **Vesper Sparrow**, **Savannah Sparrow**, and **Horned Lark** (Jim Campbell – Douglas Lake), adult **Black Tern** (Allan Brooks – Swan Lake, Vernon), **Willow Ptarmigan**, **American Robin**, and **Common Merganser** chick (John Backland), and **Mallard**, **Ring-necked Pheasant** chick, and an adult **Sora** (John Reynolds – Richter Pass).

Collected prey remains can be brought to the **WBT Wildlife Data Centre** for identification.

## **From the Scientific Literature**

### *BARN OWL REPRODUCTION: PATTERNS AND VARIATION NEAR THE LIMIT OF THE SPECIES' DISTRIBUTION*

Although the Barn Owl is the most widespread of all owl species and its diet and reproduction has been extensively studied, very little is known about its reproductive performance near the limit of its northern distribution in North America. During a 16-year study in northern Utah, Carl Marti documented 391 nesting attempts. He determined that most Barn Owls began nesting at one year of age and produced one brood per year. The owls rarely produced second broods or replaced failed first clutches.

Nearly 63% of all eggs hatched and 55% produced fledglings. Of eggs that hatched, 87% survived to fledging. March 13 was the mean date for initiation of egg-laying.

Condor 96: 468-484.

### *MICROCLIMATE OF TREE CAVITY NESTS: IS IT IMPORTANT FOR REPRODUCTIVE SUCCESS IN NORTHERN FLICKERS?*

We are all aware that dead or dying trees provide essential nest sites for many cavity-nesting species. What is not well known, however, is how reproductive success varies with features of cavity nests

and whether birds are choosing optimal nest sites or are constrained by their placement of nests.

Professor Karen Wiebe measured the structural characteristics of 160 Northern Flicker nests at Riske Creek in central British Columbia. She found that small and dead trees showed the most extreme (maximum and minimum) temperatures during the day, but, on average, were the coldest nests from the perspective of incubation. South-facing cavities reached the highest temperatures during the day. She concluded that clutch size was positively correlated with mean cavity temperature but there was no relationship between nest temperature and hatching or fledging success.

Auk 118(2): 412-421.

### *FACTORS AFFECTING RENESTING IN AMERICAN COOTS*

In a study conducted in western Manitoba during 1987-1991, biologist Todd Arnold determined that American Coots were persistent re-nesters replacing 68% of 281 destroyed clutches. Re-nest intervals averaged 2.1 days following clutch loss during laying and 6.4 days following clutch loss during incubation. Clutch size of re-nests was usually one or two eggs smaller than clutch size of initial nests.

Condor 95(2): 273-281.

### *CHOICE OF NEST BOXES BY COMMON GOLDENEYES IN ONTARIO*

Over 240 years ago nest boxes were hung on trees to provide a ready source of eggs for human consumption, especially in Scandinavia. Today, boxes are erected to increase stocks. Conservation efforts to construct, place, and monitor nest boxes can be time consuming so it is important that we determine what individual species prefer.

Biologists Harry Lumsden, R. Page and M. Gauthier developed a series of selection experiments in which Common Goldeneyes were presented with nest boxes with a variety of features. Their results showed that goldeneyes preferred boxes with black interiors, large entrance holes (13 x 10 cm), and a depth of at least 33 cm. Compass orientation, alignment with a tree trunk and species of tree on which the boxes were situated were not factors in selection.

Wilson Bulletin 97(4): 497-505.

### *SURVIVORSHIP OF PILEATED WOODPECKERS IN NORTHEASTERN OREGON*

The Pileated Woodpecker, because of its association with older forests, is a species of concern to forest managers. An important part of managing viable populations is knowledge of survivorship. In northeastern Oregon, Evelyn Bull radio-tagged birds and found that survivorship of adult Pileated Woodpeckers was 0.60 birds after 6 months, 0.47 birds after 12 months, and



0.35 birds after 18 months. Of three juveniles tagged, two survived to breed the next year. In the populations she studied it was clearly evident that adult mortality exceeded recruitment of young into the breeding population.

Journal of Field Ornithology 72(1): 131-135.

#### *WHAT LIMITS MOURNING DOVES TO A CLUTCH OF TWO EGGS?*

Mourning Doves are fully capable of incubating three-egg clutches and brooding three nestlings but they virtually always lay two eggs. In a controlled experiment, David Westmoreland and Louis Best compared the breeding success of parents rearing one-egg and three-egg clutches to that of parents rearing natural, two-egg clutches. They found that nestlings in enlarged broods grew more slowly, took 1.3 days longer to fledge, and weighed 26% less than those do in control (two-young) broods. They suggest that low post-fledging survival may negate the advantage to parents rearing three offspring per nest.

Condor 89(3): 486-493.

#### *EFFECTS OF NEST DIMENSIONS ON USE OF ARTIFICIAL BURROW SYSTEMS BY BURROWING OWLS*

The decline of Burrowing Owls in western North America are often attributed to loss of natural burrows from conversion of suitable habitat to agriculture, reductions in populations of colonial rodents and other burrowing mammals, urbanization, and other human development and activities.

Artificial nesting structures have been used to manage populations of some birds, including Burrowing Owls. It was generally assumed by biologists that dimensions of artificial burrow systems would matter little in the use by Burrowing Owls. The results of field experiments by biologists Brain Smith and James Belthoff showed that the optimal size of the floor chamber should be  $>900 \text{ cm}^2$  and the tunnels should be 10 cm in diameter.

Journal of Wildlife Management 65(2): 318-326.

#### *SECURITY BEHAVIOR IN BLACK-CHINNED HUMMINGBIRD MOTHERS AND NESTLINGS*

While watching Black-chinned Hummingbirds in New Mexico, Elizabeth Elliston noticed that during feeding the mother hummingbird and nestlings remained very quiet. After leaving the nest, however, the hungry young make a loud call to attract their mother's attention. Elizabeth suggests that the silence may be a security strategy to protect nestlings. Also, naturalists may misinterpret calling from the nest as an indication of abandoned young.

Journal of Wildlife Rehabilitation 18(2): 1-4.

#### *EGG HATCHABILITY INCREASES WITH COLONY SIZE IN CLIFF SWALLOWS*

On average, about 10% of bird eggs fail to hatch, despite remaining intact in the nest and being incubated for the normal length of time. Hatching failure is usually attributed to either infertility or embryo mortality.

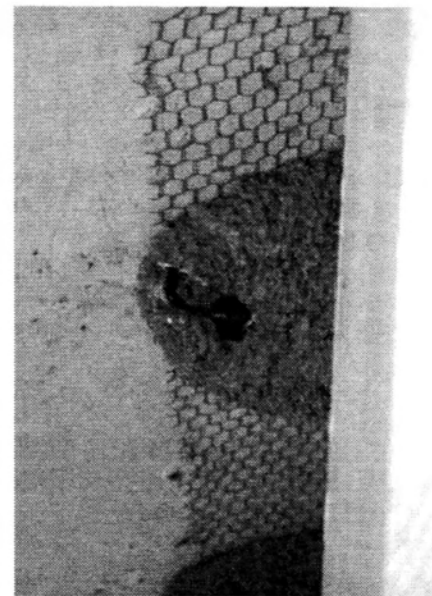
Researchers Charles and Mary Brown determined that colony-site characteristics for the Cliff Swallow in Oklahoma, such as year, mean date of first egg-laying, mean incubation period, extent of parasitism, or mean body mass of nestlings or adults did not affect the incidence of unhatched eggs. Rather, the size of the colony was important and increased hatching success in larger colonies may be a benefit of coloniality for Cliff Swallows.

Journal for Field Ornithology 72(1): 1113-123.

#### *MALE AND FEMALE PARENTAL CARE IN TREE SWALLOWS*

We are often asked what role male Tree Swallows play in raising nestlings especially within a monogamous relationship. Terry Quinney studied the contribution of both parents in the proportion of food deliveries, size of meals delivered, and nest sanitation activity at nest boxes. On average, he found that each Tree Swallow brood received a meal every 3 minutes during daylight hours (nestlings were not fed at night) with no difference in the number of deliveries by male and female. Each parent provided meals of the same size and in equal proportions to their nestlings. However, males generally removed a disproportionate number of fecal sacs (57%) which he could not explain.

Wilson Bulletin 98(1): 147-150.



*A strip of wire mesh can provide the necessary texture for Cliff Swallows to attach their nests to on buildings. Photo: Michael I. Preston*

## APPENDICES

### Appendix 1. Plumage Development of Young Waterfowl

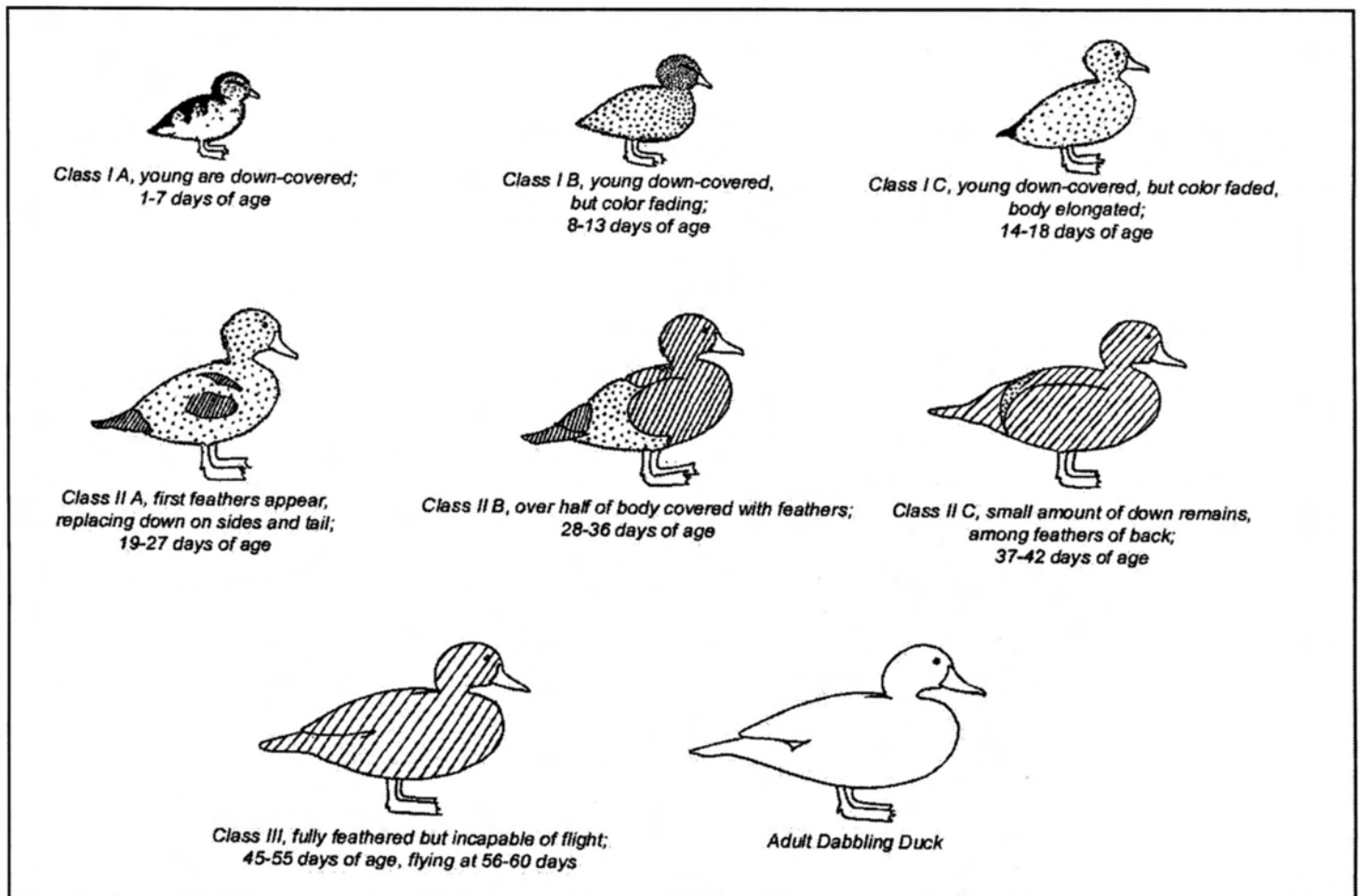
In the spring of 1997, the first B. C. Nest Record Scheme manual was issued by the **WBT Wild Bird Trust of British Columbia**, along with participating partners, as WBT Wildlife Report No. 1. An important omission in that manual was the inclusion of plumage changes of waterfowl developed by J.B. Gollop and W.H. Marshall in their 1954 publication *A Guide for Ageing Duck Broods in the Field*. This information, when recorded on nest cards, is very useful in determining breeding chronology and mortality figures as the young pass from the downy stage to the flight stage. Brood ages are recorded at three stages of growth as follows:

**CLASS I** – (Levels A, B and C) – downy stage that covers the period from hatching to the time body feathers begins to appear among the down. It usually lasts about three weeks.

**CLASS II** – (Levels A, B and C) – this stage, from about the fourth week through the sixth week, covers the period when the body feathers gradually replace the down plumage.

**CLASS III** – (Single Level) – this stage of development, which lasts for about 10 days, includes the period when the young appear fully feathered just before their first flight.

Information for each brood can simply be recorded on each nest card as I-A, I-C, II-B, III, etc. The drawings, which have been modified from F.C. Bellrose's *Ducks, Geese and Swans of North America*, should be used as the reference.



## Appendix 2. Guide to Timing of Visits to Nests of Passerine (Song) Birds.

Contents of nest when found or last visited	Next visit should be	Notes needed at next visit
Nest under construction	2 – 4 days later, to determine laying schedule	No. of eggs, warm or cold; parent at nest or not
1 – 3 eggs	3 – 5 days later, to confirm completion of clutch	No. of eggs, warm or cold; parent at nest or not
4 – 7 eggs	3 – 5 days later, to check clutch size	No. of eggs, warm or cold; parent at nest or not
Eggs and newly hatched young	6 – 8 days later, to check survival of young	Number, size, and degree of feathering on young
Young, naked or downy	5 – 7 days later, to check survival of young	Number, size, and degree of feathering on young
Young, pin-feathered	3 – 5 days later, to check survival of young	Number, size, and degree of feathering on young
Young, mostly feathered	2 – 4 days later, to check on fledging	Number and flying ability of young
Young which fly when approached	7 – 10 days later, to check on reuse of nest	
<b>Evidence of Failure</b> (if nest contained eggs or live young at an earlier visit)		
<b>Evidence of failure</b>	<b>Notes needed</b>	
Broken eggs	Evidence of predator (tracks, droppings, condition of nest)	
Dead young, in or near nest	Evidence for desertion (young unharmed), or predation (young injured, predator sign)	
<b>NOTE:</b> Most passerines have a clutch of 4 – 7 eggs, laid at daily intervals; incubation periods of up to 12 – 15 days; nestling periods of 11 – 19 days (open nesters near lower figures, cavity nesters near upper figures)		

## Appendix 3. WBT Wildlife Data Centre - A Central Repository for Historical and Current Information on Wildlife in British Columbia.

British Columbia now has North America's first **Wildlife Data Centre** that is a comprehensive and centralized repository dedicated to preserving, protecting, and disseminating information on wildlife in the province. **WBT** has acquired major historical collections of field notes, diaries, libraries, artwork, and photographs from experienced naturalists and professional biologists active throughout the province. Some of this information dates back to the 1870s.

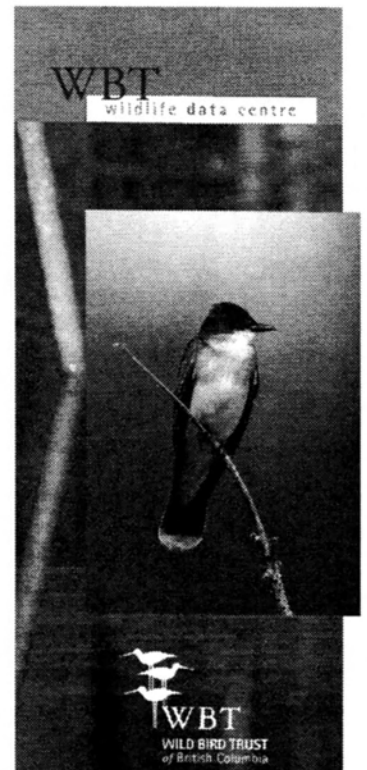
Data is meticulously sorted and categorized. Information is added to appropriate databases, for example the **British Columbia Nest Record Scheme**, **British Columbia Birds Databases**, **British Columbia Herpetology Databases**, **British Columbia Wildlife Library**.

The extensive databases and reference material in the **Wildlife Data Centre** is presently being used to produce popular field guides, regional bird books and checklists, books on wildlife in jeopardy, and new seasonal

distribution maps for species summarized by individual life histories to emphasize critical habitats.

The **Wildlife Data Centre** will grow to become the primary source for historical and current information on all aspects of the life history of more than 650 species of birds, mammals, amphibians, and reptiles in the province.

This image is a copy of the cover for the new **WBT Wildlife Data Centre** brochure. To learn more, please contact us at the address or phone number on the next page.





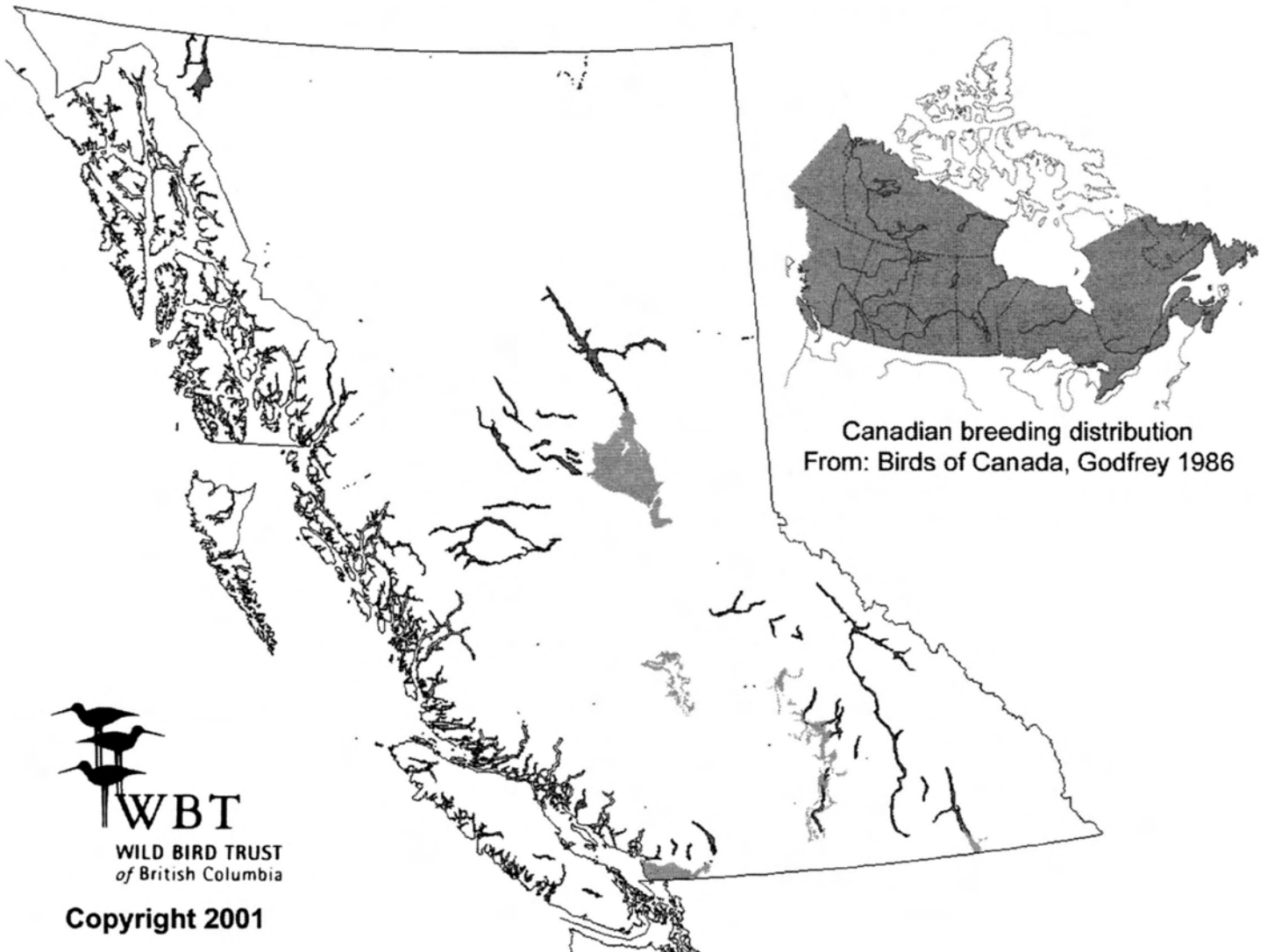
## Appendix 4. Using the British Columbia Nest Record Scheme for Conservation

There are a multitude of books and internet-based resources that allow us to look at the distribution of species throughout the province. From these, we can identify at a very basic level, those areas that might require management, provided we understand a little about the habitat of the species in question. *The Birds of Canada*, written by esteemed ornithologist W. Earl Godfrey, was published in 1986, and was considered a major work at the time, given the limited knowledge and lack of "real" data. But now, sixteen years later, we are beginning to acquire two essential elements that were so desperately lacking at that time: 1) the computer tools necessary to process information more precisely; and 2) sufficient numbers of nesting records for analysis.

The Short-eared Owl is a wonderful example of how we can attain a better understanding of a species' requirements by using real data and detailed habitat information. The map at the top right of the figure below is from *The Birds of Canada*. It demonstrates the early

assumed distribution of that species, showing the Short-eared Owl as breeding throughout B.C., excluding the Queen Charlotte Islands. The larger map is a WBT Predictive Distribution Map that was produced using actual nesting records from 1901 - 1999. For three years we tested the power of the model by visiting areas for which the model predicted birds would breed, but where no data previously existed. We also visited areas adjacent to predicted areas to see whether or not the predictions were conservative. The results – a perfect match. The Short-eared Owl has not suffered from serious contraction of its breeding range in British Columbia – we just lacked the data for analysis.

With continued support of the British Columbia Nest Records Scheme, the nesting information that you submit will assist in developing well-defined breeding distributions for species in the province by specific habitat needs. As a result, management programs can be more pro-active and cost-efficient.



## REQUESTING AND SUBMITTING CARDS

We have now worked out some of the "bugs" in our computer programs for occurrence and breeding records and hope to start an instruction manual that combines how to record and submit nest cards and wildlife observations in 2002. Meanwhile, nest cards for the 2002 season, and sighting data sheets, can be obtained from:

**B.C NEST RECORD SCHEME**  
P. O. Box 6218, Station C  
Victoria, B. C. V8P 5L5  
Tel/Fax (250) 658-0999

We prefer to have nest cards completed and submitted by **October 1** so the task of compiling and publishing the report can be completed by the end of the year. In some years, like this year, the report had to be ready for the printers in early December, mainly due to available funding. That meant everything had to be sorted, compiled, written, proofed, and published before late December.

**Orville Gordon** completed some late cards from the 2000 season and submitted them on **March 15!** Others who sent in cards well before the nesting season ended included **Hilary Gordon, Hylda Mayfield, Eva Durrance, Peter Elliott, Mary J. Birch, Harold C. Craven, Ed Beynon, Rick Marshall, Stephen Bennett, Jim Patterson, Beverly Butcher, and Tunie Grant.** One participant, **Lorri Harpur**, scrambled to complete cards before he went to Washington for a summer job!

We are again grateful to those who submitted their cards in species (and participant) order, especially **Linda Van Damme, Mark Nyhof, Rita Wege, Larry Prosser, Hilary Gordon, Vicky Atkins, Todd Heakes, Alice Beals, and Janice Arndt.** This facilitates preparation of the report.

For species acting as hosts for **Brown-headed Cowbird** eggs or young please fill out a separate card for the **BHCO** and cross-reference it to its host. For young or recently fledged **BHCO** young be sure to indicate if the young was in the nest on the front of the new nest card.

Also, **PLEASE** use a dark ballpoint pen or dark ink (not pencil) and write clearly.

## ACKNOWLEDGEMENTS

The task of sorting, compiling, and summarizing the cards as they arrived was handled by **Diana Demarchi** and **Andrea Norris.** Breeding records encountered while entering occurrence data to WBT electronic databases were transferred to nest cards by **Nathan Bodnar, Diana Demarchi, Felice Griffiths, Amanda Johnson, Andrea Norris, Joanna Preston, Amber Robinson, Wayne Campbell, and Michael Preston.**

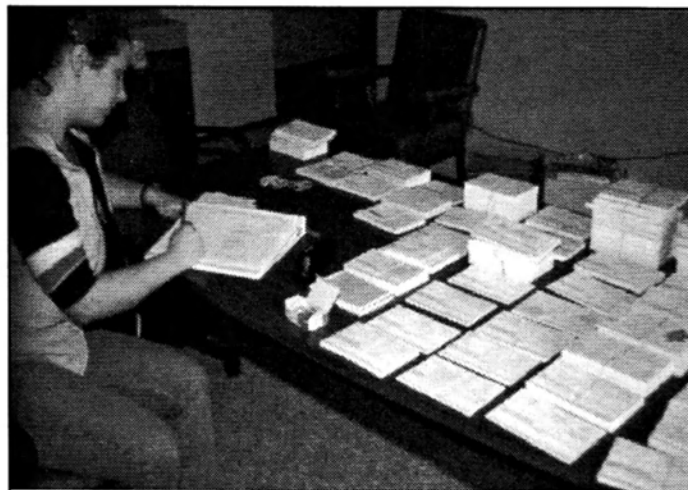
Regionally, **Hilary Gordon** transferred nesting information to cards from local naturalists in the **Salmon Arm** and **Revelstoke** areas and **Linda Van Damme** for the **Creston Valley.**

**Mark Nyhof** supplied the professional artwork throughout the report, including the cover illustration of the American Kestrel.

Many people announced publicity surrounding the BCNRS in naturalist club newsletters, newspaper articles, meetings, workshops, and lectures. Especially helpful were **Hilary Gordon** and **Janice Arndt.**

**WBT Wild Bird Trust of British Columbia, Weyerhaeuser, and the Federation of British Columbia Naturalists** continued their support of the BCNRS.

We are grateful to everyone. **THANK YOU!**



*Diana Demarchi compiling nest cards for the 2001 nest report at the WBT Wildlife Data Centre in Victoria. Photo by: Michael I. Preston*

## Special Publications

**1. The Birder's Complete Life Checklist of British Columbia Birds**

R. Wayne Campbell. Leaflet. April 1998. \$2.50.

**2. Four Trip Field List for British Columbia Birds (including Mainland and Offshore Waters).**

R. Wayne Campbell. 22 pages. October 1998. Out of Print.

**3. British Columbia Birds: A Complete Checklist**

R. Wayne Campbell, Linda M. Van Damme, Neil K. Dawe, and Stephen R. Johnson. Available Spring 2002. \$10.00.

**4. Pocket Checklist of Birds of the Westcoast of Vancouver Island.**

Adrian Dorst. Available Spring 2002. \$3.00.

**5. Pocket Checklist of the Amphibians and Reptiles of British Columbia.**

R. Wayne Campbell, Brent M. Matsuda, David M. Green, and Patrick T. Gregory. Available Spring 2002. \$3.00.

## Wildlife Reports

**1. British Columbia Nest Record Scheme Instruction Manual.**

R. Wayne Campbell. 46 pages. April 1997. [No charge to participants in *Birds in the New Millennium* projects] \$5.00

**2. British Columbia Birds: A Species List – 1997 (Common and Scientific Names, Sequence, and 4-Letter Codes).**

R. Wayne Campbell. 22 pages. January 1998. [No charge to participants in *Birds in the New Millennium* projects] \$5.00

**3. British Columbia Nest Records Scheme: 43<sup>rd</sup> Annual Report – 1997 Nesting Season.**

R. Wayne Campbell, Maureen L. Funk and Lyndis Davis. 22 pages. March 1998. [No charge to participants in *Birds in the New Millennium* projects] \$5.00

**4. Spring and Summer Birds of Dawson Creek, 1991-1995.**

Mark Phinney. 60 pages. December 1998. \$7.00

**5. British Columbia Nest Records Scheme: 44<sup>th</sup> Annual Report – 1998 Nesting Season.**

R. Wayne Campbell, Maureen L. Funk, Lyndis Davis and Jeremy V. Kimm. 24 pages. February 1999. [No charge to participants in *Birds in the New Millennium* projects] \$5.00

**6. British Columbia Nest Record Scheme: 45<sup>th</sup> Annual Report – 1999 Nesting Season.**

R. Wayne Campbell, Andrea R. Norris, Maureen L. Funk and Jeremy V. Kimm. 26 pages. February 2000. No charge to participants in *Birds in the New Millennium* projects] \$5.00

**7. British Columbia Nest Record Scheme: 46<sup>th</sup> Annual Report – 2000 Nesting Season**

R. Wayne Campbell and Michael I. Preston. 26 pages. January 2001. No charge to participants in *Birds in the New Millennium* projects] \$5.00

*This Report may be cited as:*

Campbell, R.W., M.I. Preston, and L.M. Van Damme. 2002. *British Columbia Nest Record Scheme: 47<sup>th</sup> Annual Report – 2001 Nesting Season*. WBT Wild Bird Trust of British Columbia Wildlife Report No 8., West Vancouver. 26 pages.

## WBT Wild Bird Trust of British Columbia

### OUR MISSION

To initiate, develop, maintain, and support visionary and proactive programs for the protection, caring, and conservation of birds, and other wildlife, throughout British Columbia.

### WHO WE ARE

**WBT Wild Bird Trust of British Columbia** was founded in 1993 to aid in land acquisition for wildlife and promote scientific and educational activities for conservation. It fills an unoccupied wildlife resource niche in the province that complements the work of citizens, environmental groups, industry, and government agencies.

We are incorporated as a non-profit society under the **Provincial Societies' Act** (#S-31197) and as a charitable organization under the **Federal Income Tax Act** (#1004126-54).

### ACCOMPLISHMENTS

In less than eight years we have acquired, and now manage, four sanctuaries: **The Conservation Area at Maplewood Flats** in North Vancouver, **McFadden Creek Heronry** on Salt Spring Island, **Forslund Watson Nature Reserve** in Langley, and **The Corrigan Nature Sanctuary** in Surrey. Our fifth sanctuary, **Tricomali Nature Sanctuary** on Galiano Island, is under discussion.

In addition, we hold Restricted Wildlife Covenants on **Shangri-la Nature Sanctuary** in Victoria and **The Langtry Wildlife Reserve** in Cloverdale.

#### Education and Extension

WBT helps steer and promote the care and enhancement of habitat for wildlife on privately owned land through **Naturescape British Columbia** and in schoolyards through the **Greening School Grounds** program.

Education is provided in the community through on-site signage and interpretive programs at **Maplewood Flats** in North Vancouver and **McFadden Creek** on Salt Spring Island.

Staff and Directors lead guided nature walks and wildlife tours, present lectures and workshops, and participate in conferences and conservation meetings around the province.

We coordinate the **Heron Stewardship Program** that has been developed to protect the larger Great Blue Heron nesting colonies on private land in the Georgia Basin.

Conflicts between humans and wildlife is being presented in a series of innovative and popular provincial field guides and regional bird books in our program **British Columbia Wildlife in the New Millennium**. The reference books will include current information on vulnerable and persecuted species and emphasize immediate conservation and management concerns.

#### Research and Conservation

Committed to update, and keep current, new information on birds following the publication of the 4-volume set on **The Birds of British Columbia** in 1990, 1997, and 2001 and the handbooks on **The Amphibians of British Columbia** and **The Reptiles of British Columbia** issued in 1984.

Developed **long-term monitoring programs**, based on scientific methods, for songbirds, owls, birds of prey, colonial nesting marine birds, fresh-water birds, waterbirds, marsh birds, cavity-nesting birds, and amphibians.

Established a new **wildlife publication series** for quick distribution of information to managers, scientists, naturalists, and the general public.

Initiated new **wintering, migration, and breeding distribution maps** for amphibians, reptiles, birds, and mammals by habitat rather than monthly status.

Increased participation and confidence in the **British Columbia Nest Record Scheme** and **Wildlife Occurrence Databases** so that WBT now operates the largest and most successful program in North America.

### OUR NEXT MAJOR PROJECT

There are over **1,000 different registered groups** in British Columbia with an interest in wildlife and none that is solely dedicated to preserving historical and current information about its fauna in a central repository. In addition, unique information is being sent to national and international databases and British Columbia data is being lost.

#### WBT Wildlife Data Centre

WBT has established Canada's first comprehensive repository for provincial wildlife information, a resource that becomes more valuable over time.

Together, we play a critical role in the future of wildlife in British Columbia. With your support, we are hoping to obtain a permanent home for this impressive and invaluable collection. Please, **Give Wildlife a Chance** by donating to our endeavour.