Protecting Vulnerable Species:

A Five-Year Plan for Species at Risk in British Columbia





British Columbia

Message from the Ministers of Environment and Forests, Lands and Natural Resource Operations

British Columbia is world-renowned for its spectacular natural diversity. British Columbians value this natural diversity, and the social, economic and cultural benefits that it provides. As B.C. strives to maintain both a healthy environment and a thriving economy, some species are in need of special attention.

This plan is government's vision and commitment to ensuring that the needs of species at risk are considered as B.C. pursues its economic and social priorities. It sets out those actions that government plans to undertake over the next five years to improve our approach to management of species at risk in the province.

What government does is only part of the solution. Together all British Columbians need to challenge ourselves to think about what we can do to protect and recover species at risk.

Mary Polak
Minister of Environment

Steve Thomson
Minister of Forests, Lands and Natural Resource Operations

Contents

WESTERN SCREECH-OWL, MACFARLANEI SUBSPECIES

British Columbia is world-renowned for its spectacular natural beauty, high biological diversity and wealth of natural resources.

MOUNTAIN GOAT

B.C. has the highest diversity of native wildlife species in Canada. Approximately 50,000 species of animals and plants call this province home.

Healthy natural ecosystems benefit all British Columbians.

Naturally functioning ecosystems play a central role in our economy by providing essential services such as clean water, fertile soils, crop pollination, abundant renewable resources and carbon sequestration.

RED-LEGGED FROG

Maintaining species is essential for ecosystem health.

SEA OTTER

"The land is one organism. Its parts, like our own parts, compete with each other and co-operate with each other.... To keep every cog and wheel is the first precaution of intelligent tinkering."

— ALDO LEOPOLD, FORESTER, ECOLOGIST, AND AUTHOR OF *A SAND COUNTY ALMANAC* (1949); FROM *ROUND RIVER: FROM THE JOURNALS OF ALDO LEOPOLD* (1953)

Species at risk of extinction are vulnerable and need special attention.

PACIFIC GIANT SALAMANDER

"The species that we are potentially losing are the 'biological moving parts' that keep our ecological communities functioning."

— REPORT OF THE BRITISH COLUMBIA TASK FORCE ON SPECIES AT RISK

what if...

Species at risk have what they need to survive and thrive

EDITH'S CHECKERSPOT, TAYLORI SUBSPECIES

on water and land

in city and country

in wilderness and on working lands

what if...

The most vulnerable species are considered in all land and water use decisions

by all levels of government
in development of natural resources
in management of land and water

GREAT BASIN SPADEFOOT

... ensuring we support a strong and diverse economy and a vibrant natural heritage now and into the future.

what if...

Everyone works together to ensure today's species at risk are here for our children

OLIVE CLUBTAIL

all levels of government
industry, business, landowners, citizens
stewardship groups

what if...

The most vulnerable species are protected

from activities that threaten them
consistently across sectors
widely through voluntary stewardship

... by clear, consistent and enforceable laws,
effective policies, and innovative programs.

PACIFIC TAILED FROG

how do we get there?

SHARP-TAILED SNAKE

A clear set of principles will keep us on track. These principles are consistent with the Canada–British Columbia Agreement on Species at Risk.

Act now.

- Maintaining **healthy ecosystems** requires protecting the full complement of species, both common and uncommon, and including species at risk of extinction.
- Protection and recovery of species at risk require **flexible** approaches with a focus that may range from entire ecosystems to single species depending on the need.
- **Proactive actions** are needed to prevent loss of species at risk and to facilitate timely protection and recovery efforts.

SPOTTED OWL

Act together.

- Conservation, protection and recovery of species at risk require the **combined efforts** of all levels of government, First Nations, neighbouring jurisdictions, land managers, land owners, resource users and communities.
- **Consultation and engagement** including all levels of government, First Nations, conservation partners and stakeholders are critical to the success of species-at-risk protection and recovery.
- **Cooperation, collaboration and communication** across jurisdictions and agencies are essential for the implementation of effective and complementary programs for species at risk.

WILLIAMSON'S SAPSUCKER

Consider environmental, economic and community needs.

- Decisions related to the management of species at risk must be supported by the **best available information** and not be hampered by lack of scientific certainty.
- Scientific information that supports decisions related to species at risk must be made **readily available**.
- Development and implementation of recovery measures for species at risk must be prioritized and take into account the **social and economic interests** of B.C.'s communities.

CARIBOU

Set a clear path forward.

Most importantly, we need a clear and practical plan for the future.

The following pages outline the key components of British Columbia's Five-Year Plan for Species at Risk and why each component is important.

MORMON METALMARK

Themes for Success of British Columbia's Five-Year Plan for Species at Risk

A species-at-risk plan that successfully balances British Columbia's economic, environmental and community priorities must:

Improve species conservation through management at the ecosystem and landscape scale

A proactive approach to species management pays off

The best way to conserve wild plant and animal species is to prevent them from becoming at risk in the first place. This means understanding what each species needs to survive and prosper and taking that into account before starting any activities that might be harmful.

We need new ideas to ensure species at risk are considered in all land management decisions, such as B.C.'s shift to a "one land manager" approach to decision-making. Decision-makers need information early so they can use it to avoid or minimize potentially harmful effects of activities. It is also important to assess cumulative effects of multiple activities on the landscape (distinctive geographic areas), based on commonly defined environmental, social and economic values, including species at risk.

FISHER

SHARING INFORMATION MAKES A DIFFERENCE FOR FISHER

New information from research conducted throughout the range of **Fishers** in B.C. has been made available to forest professionals through a targeted information-sharing project. The best available information is now being used to support science-based sustainable forest management policy, planning and operational decisions, resulting in better conservation outcomes for Fisher in B.C.

Actions to improve species conservation through proactive management:

- **Complete the identification of an initial set of environmental values**, including species at risk, to facilitate a consistent approach to informing natural resource decisions (by the end of 2014[1]).
- **Support development of a cumulative effects assessment framework** for natural resource decisions (including consideration of ecosystem and species-at-risk values) (ongoing).
- **Develop clear government objectives related to species-at-risk values** that can be applied in all natural resource management decisions (started in 2013).
- **Complete and implement policy, procedures and guidelines for mitigating impacts** to species at risk as a key component of integrated decision-making for natural resources (complete by 2014; implement starting in 2014).
- **Incorporate information about known occurrences of species at risk and habitat** important for their survival and recovery in the early stages of natural resource management decision-making (ongoing).

NORTHERN RUBBER BOA

[1] Throughout the plan, by "year" indicates that the action will be completed by the end of that year.

Improve species conservation through management at the ecosystem and landscape scale

Landscape-level approaches are essential

Two of the main threats to native species in B.C. are loss of habitat and fragmentation of landscapes in which they live. Maintaining key habitats and connections between them is even more important with climate change, which over time can alter the traditional range of species. By addressing species' needs at the landscape level, we can try to ensure every species has enough good-quality habitat. In some cases, preventing ecosystem deterioration may reduce the need to manage individual species at risk.

NORTHERN SAW-WHET OWL, BROOKSI SUBSPECIES

BRITISH COLUMBIA ADOPTS ECOSYSTEM-BASED MANAGEMENT ON THE NORTH AND CENTRAL COAST

Ecosystem based management (EBM) is a strategic approach to managing human activities that seeks to ensure the co-existence of healthy, fully functioning ecosystems and human communities. In the Great Bear Rainforest, a consortium of forest companies, the provincial government, First Nations and communities agreed to adopt an EBM approach to manage forest activities in extensive areas of B.C.'s north and central coast.

Actions essential for managing at the ecosystem and landscape scale:

- **Develop multi-species approaches** that are regionally focussed to implement priority species-at-risk actions within provincial sub-regions (started in 2013).
- **Develop an approach for using ecosystems and ecological communities** to plan and manage for lesser-known species such as non-vascular plants and invertebrates (by 2015).
- **Investigate options for developing and establishing a landscape-level program** to monitor condition and trends of environmental values, including species at risk, within limits of existing data collections (by 2015).
- **Work with conservation partners to identify areas** important for landscape-scale species' movements and to improve landscape conservation planning across jurisdictions (ongoing).
- **When opportunities arise, apply legal habitat designations** with consideration of existing provincial parks or other conservation lands to maintain habitat connectivity in areas most important for species migration in a changing climate (ongoing).

WOLVERINE

Provide the best available information to support identification, management and recovery of species at risk

Good information is the foundation of species-at-risk status assessments

Good information is needed to support sound decisions about species at risk. Access to science-based information about species in B.C. facilitates accurate conservation status assessments by the B.C. Conservation Data Centre and the Committee on the Status of Endangered Wildlife in Canada. However, this information is not always readily available, and in many cases must be collected. Lack of information can create a false impression of a species' rarity or risk of extinction or extirpation, which may in turn lead to unnecessary investments in subsequent protection and recovery actions.

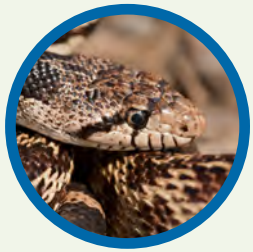
OLIVE CLUBTAIL

INVESTING IN INVENTORY PAYS OFF

Between 1996 and 2004, the **B.C. Conservation Data Centre** (CDC) in partnership with the **Royal B.C. Museum** conducted inventories for dragonflies in B.C. After visiting 1,480 sites and collecting more than 20,000 specimens, the CDC reassessed the conservation status of the 87 known species of dragonflies in B.C. Twenty of these species (23%) were found to be at a lower level of risk than previously thought, and only three species (3%) were found to be more at risk.

Actions necessary for ensuring the best information is available to support species' status assessments:

- **Streamline policies and procedures for data collection** to encourage submissions of data to the Province to support conservation status assessments and legal listing decisions (by 2014).
- **Develop a process to ensure priorities for species status assessment** are informed by emerging issues (such as cumulative-effects assessments, national listing processes and rapidly changing threats) (by 2015).
- **Develop options for innovative and enduring funding** for species-at-risk inventory, monitoring and research (by 2017).



GOPHER SNAKE, CATENIFER SUBSPECIES

B.C.'S CONSERVATION DATA CENTRE LEADS NORTH AMERICA

Conservation status assessments to determine whether a species is at risk require current information on the abundance, distribution, population and habitat trends, threats and natural history of the species. The Conservation Data Centre systematically collects and disseminates information on plants, animals and ecosystems (ecological communities) at risk in the province. B.C.'s data centre is a recognized leader in North America's NatureServe network.

Provide the best available information to support identification, management and recovery of species at risk

Effective species-at-risk conservation depends on reliable information sources

British Columbia takes a science-based approach for guiding conservation actions in the province. This approach relies on biological and management information from a variety of sources, including the Conservation Data Centre and species experts, to assess conservation priorities and recommend management actions. The B.C. Species and Ecosystems Explorer is a centralized source for information about species at risk in B.C. Continued improvements to these tools will ensure that this information is made accessible to decision-makers, recovery planners, resource users and the public.

CULTUS PYGMY SCULPIN

A "ONE-STOP SHOP" FOR INFORMATION ON SPECIES AND ECOLOGICAL COMMUNITIES AT RISK

B.C.'s Species and Ecosystems Explorer provides information on approximately 6,000 plants and animals and over 600 ecological communities (ecosystems) in British Columbia. This is the place to go for more information on the conservation status, locations and level of protection of these species and ecosystems.

Actions to provide reliable information about species conservation status and priorities:

- **Pilot a refined priority-setting process for species at risk** that is more effective and relevant in a regional Natural Resource Sector model, and examine ways to integrate the delivery and tracking of these priorities into projects and programs (by 2015).
- **Improve tools and processes to facilitate submission of data to the Province** and to provide user-friendly access to species-at-risk information (ongoing).
- **Pursue support from federal species-at-risk agencies** to position the Conservation Data Centre as a portal for all information on species and ecosystems at risk in B.C., regardless of legal jurisdiction (by 2017).

LEMMON'S HOLLY FERN

Provide the best available information to support identification, management and recovery of species at risk

Science-based planning leads to commitments to management and recovery

Planning for management or recovery of species at risk is a complex process, bringing together sound science and community traditional knowledge, and involving many players and partners including all levels of government and many government agencies. Acting on the advice in recovery or management plans can be even more complex, particularly when management options have social or economic implications. Multi-species and ecosystem approaches need to be considered, and government decisions and commitments to take action must take community and economic needs into consideration.

WATER-PLANTAIN BUTTERCUP

PLANNING IS THE FOUNDATION FOR RECOVERY AND MANAGEMENT

To date, B.C. has completed or cooperated with the federal government to complete 100 recovery strategies, recovery plans and management plans for 127 species at risk in the province. You can see them at the B.C. Ministry of Environment's Recovery Planning website.

Actions that support commitments to science-based species management and recovery:

- **Promote coordinated, cross-government accountability in taking action** to prevent endangering species and to protect and recover species currently at risk (ongoing).
- **Develop plans that reflect government decisions and commitments** to implement actions for species management or recovery (ongoing).
- **Develop policies, procedures and expertise to support ecosystem-based** or multi-species approaches to recovery planning and implementation for species at risk (by 2016).
- **Develop a process to track and publish government decisions and commitments** to implement recommended recovery and management actions (by 2017).

LYALL'S MARIPOSA LILY

Provide the best available information to support identification, management and recovery of species at risk

Effective conservation actions depend on up-to-date information

Sound scientific information and community traditional knowledge are a necessary foundation for on-site species-at-risk management and recovery activities. These activities, which aim to reduce threats to a species' habitat or its population, are most effective when undertaken with the support and engagement of industry and other partners. Procedures are needed to ensure: that scientific and other information is captured in recovery plans and used consistently when implementing provincial habitat protection measures; and that progress toward achieving recovery objectives is consistently tracked and reported.

WHITE STURGEON

WHITE STURGEON: A UNIQUE COMPONENT OF BRITISH COLUMBIA'S FRESHWATER FAUNA

White Sturgeon has significant cultural and fisheries values. Recovery programs have been established for at-risk populations in the Nechako, upper Fraser, Columbia and Kootenay rivers. These initiatives involve a high degree of collaboration with all levels of government, industry, First Nations and international partners, working toward to the long-term recovery of the species. Significant financial investments from industrial partners have been essential to the success of these programs.

Actions to ensure up-to-date information is used to implement conservation measures:

- **Conduct on-site activities designed to protect habitat and mitigate threats** to species at risk (such as implementing habitat protection and restoration measures, and controlling invasive species) and apply advances in knowledge and techniques as they become available (ongoing).
- **Conduct on-site activities designed to protect and recover species-at-risk** populations (such as captive breeding, population augmentation and predator control) and apply advances in knowledge and techniques as they become available (ongoing).
- **Seek cost-sharing opportunities and arrangements** with industry and other partners to support species-at-risk mitigation and recovery efforts (ongoing).
- **Ensure scientific information in recovery planning documents** (including implications of climate change) is incorporated consistently into implementation of provincial habitat protection tools and initiatives (by 2015).
- **Ensure recovery actions and measures to reduce impacts on species at risk** are tracked consistently and reported regularly (starting in 2014).

SHOWY PHLOX

Encourage British Columbians to embrace stewardship of species at risk across all lands

Species-at-risk conservation requires a shared stewardship approach

All British Columbians have a responsibility to ensure species do not become more at risk of extinction or extirpation (local extinction). Stewardship groups, conservation partners, First Nations, federal, provincial and local governments and others play an important role in the conservation of species at risk. Many of these groups are well positioned to carry out their work and would benefit from increased provincial coordination and scientific and technical support.

PURPLE MARTIN

PURPLE MARTIN RECOVERY IN B.C. – A STEWARDSHIP SUCCESS STORY

In 1985, only five breeding pairs of **Purple Martins** remained on Vancouver Island. The population had declined largely due to loss of nesting places (typically cavities in deadwood) as a result of logging practices and activities such as replacing old waterfront pilings with ones coated in creosote. To save the species from extirpation from B.C., naturalist group volunteers erected nest boxes in areas likely to attract Purple Martins. Now there are more than 750 nesting pairs and the population is no longer at imminent risk of extirpation.

Actions necessary to promote a shared stewardship approach to conservation of species at risk:

- **Encourage and coordinate efforts of all federal and provincial government agencies** to deliver actions, within their areas of influence, to manage and protect species at risk (ongoing).
- **Engage all** local governments (municipalities and regional districts), conservation partners, stewardship groups, First Nations and others in efforts to manage and protect species at risk (ongoing).
- **Work with conservation partners** to ensure species and ecosystems at risk values are incorporated into efforts to acquire and manage lands for conservation (ongoing).
- **Meet government's obligations to consult with First Nations** during the process of implementing actions to protect and recover species at risk (ongoing).

PALLID BAT

Encourage British Columbians to embrace stewardship of species at risk across all lands

LONG-BILLED CURLEW

Stewardship of species at risk can be supported in many ways

A high proportion of B.C.'s species at risk occur in naturally productive areas that are also attractive for human settlement and consist primarily of private lands. Individuals and conservation groups whose efforts are primarily focussed on private lands make a big contribution to voluntary protection and recovery of species at risk. Tools such as incentives and funding inspire, encourage and reward voluntary efforts to protect and manage species at risk. If local governments, conservation partners, First Nations, private landowners and industry have these tools, they will be able to contribute more fully to species-at-risk conservation.

LOCAL GOVERNMENT COLLABORATION PROMOTES LOCAL STEWARDSHIP

The Species and Ecosystems at Risk Local Government Working Group was established to develop a collaborative, province-wide approach for protection of species and ecosystems at risk on private and local government lands in B.C.

It includes over 100 municipal, regional and provincial government representatives who work closely with local conservation groups to build on existing efforts to enhance protection for species at risk.

Actions that will support species-at-risk stewardship by all:

- **Provide recognition and support for conservation partner-led** ecosystem-based initiatives that contribute to conservation of species at risk (ongoing).
- **Explore and recommend new ways** (including incentives and possible project funding) to promote voluntary protection of species at risk (by 2015).
- **Develop options for innovative and enduring funding** for species-at-risk stewardship programs (by 2017).

COLLABORATIVE CONSERVATION PLANNING IN THE OKANAGAN REGION

The Okanagan Region is home to a large number of species at risk. Two partnerships in the area bring non-governmental, government, and First Nations organizations together to conserve biodiversity. These partnerships are coordinated and facilitated by the Okanagan Collaborative Conservation Program (North and Central Okanagan) and the South Okanagan–Similkameen Conservation Program. Strong community support and involvement help create a positive balance between wildlife requirements and human needs and aspirations in the region.

HOWELL'S TRITELEIA

Apply protection for species at risk consistently across all sectors

Comprehensive, complementary laws are necessary to protect species at risk

A number of laws protect species at risk and their habitats in B.C. To be successful, laws must be clear, straightforward, fully implemented and used efficiently. Comprehensive, reliable and effective protection for species at risk requires regularly reviewing and amending existing legislation to keep it current. A suite of laws that complement each other will provide certainty across industrial sectors and provincial lands, and will clarify obligations when development and resource use overlap with species-at-risk ranges.

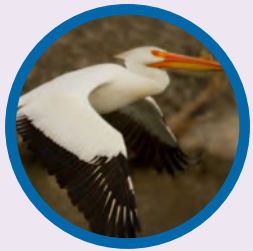
SCOULER'S CORYDALIS

SCOULER'S CORYDALIS – A HABITAT PROTECTION SUCCESS STORY

Scouler's corydalis (*Corydalis scouleri*) is a large and showy vascular plant that occurs in Canada in only a few watersheds on southwest Vancouver Island. In 2001, the Committee on the Status of Wildlife in Canada (COSEWIC) assessed this species as threatened. However, additional surveys in 2002/03 found the species at more locations and in higher numbers than previously known. Once protection was put in place for over half of the known populations, the species was reassessed as not at risk in 2006.

Actions to build comprehensive, complementary laws to protect species at risk in British Columbia:

- **Update the list of species at risk**, complete implementation of Wildlife Habitat Areas and Ungulate Winter Ranges (ongoing), and identify Wildlife Habitat Features (by 2014) under the *Forest and Range Practices Act* and the *Oil and Gas Activities Act*.
- **Analyze opportunities for and make recommendations regarding changes** to existing or new policy and legislation to address gaps in protection for species at risk, ensuring input from stakeholders and the public is considered prior to making any changes (started in 2013).
- **Routinely assess whether ongoing maintenance and evolution** of natural resources legislation could incorporate additional changes to improve management of species at risk (ongoing).
- **Participate in intergovernmental committees and agreements** and provide advice to externally led policy, legislation and regulatory processes (ongoing).



AMERICAN WHITE PELICAN

Measure and report out on government's investments in species at risk

Monitoring and reporting provide assurance of program effectiveness

Government and others make significant investments in species-at-risk management. Everyone wants to be assured that government resources are invested wisely and effectively, that conservation objectives of the species-at-risk program are being achieved, and that the results are satisfactory to British Columbians. It is critical to identify what data will be monitored, how and for how long.

Monitoring and reporting of performance are needed to support decisions about conservation priorities, planning and further allocation of resources. Reports documenting results of conservation activities and species-at-risk program progress must be relevant, transparent and readily available to stakeholders and the public.

PAINTED TURTLE

ENVIRONMENTAL REPORTING BC

Environmental Reporting BC, a new approach to reporting on the state of our environment, provides access to scientific data and information about our environment and how it relates to British Columbians. This information comes in the form of indicators that examine the state and trends of different aspects of our environment, translating complex scientific information and telling stories about the environment and what it means for people and the economy.

Actions to demonstrate effectiveness of government's investments in species at risk:

- **Develop an initial indicator for State of Environment Reporting** on the change in status of native vertebrate species in B.C. (completed in 2013).
- **Develop a centralized internet approach to public reporting** on species at risk in B.C. that would provide access to and link together different initiatives, agencies and information related to species at risk in British Columbia (starting in 2015).
- **Monitor and report on corporate and program level actions** such as timely completion of planning documents, number of legal protections established and implementation of government-led recovery actions (starting in 2014).

MONARCH

TIMELINE FOR B.C.'S FIVE-YEAR PLAN FOR SPECIES AT RISK (SAR)

2013 | 2014

ONGOING

Page 17 Incorporate SAR information in decisions early
17 Consider cumulative effects in decisions
19 Work with partners on landscape conservation planning
19 Secure habitat to maintain connectivity
23 Improve tools for submitting and accessing information about SAR
25 Promote cross-government accountability for taking action
25 Develop government implementation plans
27 Implement habitat protection and threat mitigation actions
27 Implement SAR population protection and recovery actions
27 Seek cost-sharing opportunities for SAR projects
29 Encourage coordination of actions by government agencies
29 Engage everyone in protection of SAR
29 Work with partners to acquire and manage conservation lands
29 Meet obligations to consult with First Nations
31 Recognise and support partner-led initiatives
33 Apply existing legal habitat protections
33 Recommend changes to natural resources legislation
33 Participate in intergovernmental processes

STARTED IN 2013

17 Develop government objectives for SAR
19 Develop regionally-based multi-species approaches
33 Recommend changes to policy and legislation to protect SAR

STARTING IN 2014

17 Implement mitigation policy and procedures
27 Track and report on SAR recovery actions
35 Report program progress

35 Track changes in native vertebrate status

COMPLETED IN 2013

17 Identify environmental values for decision-makers
17 Complete mitigation policy and procedures
21 Encourage data submissions to the Province

BY END OF 2014

2015 | 2016 | 2017

STARTING IN 2015

35 Centralize reporting of SAR information

BLOTCHED TIGER SALAMANDER

19 Develop an approach to manage lesser-known SAR
19 Investigate options for landscape-level monitoring
21 Prioritize status assessments by emerging issues
23 Pilot a refined priority setting process for SAR
27 Use science advice to implement habitat protection
31 Explore ways to promote voluntary stewardship

BY END OF 2015

25 Support ecosystem-based recovery planning approaches

BY END OF 2016

21 Develop options to fund SAR inventory, monitoring and research
23 Position the CDC as a portal for all SAR information
25 Publish government decisions and commitments
31 Develop options for SAR stewardship funding

BY END OF 2017

Credits

FRONT COVER (BACKGROUND): Cory Leis **DEVIL'S CLUB**

FRONT COVER SPECIES (L–R): Richard Klafki **AMERICAN BADGER**; Brenda Costanzo **HOWELL'S TRITELEIA**; Andy Teucher **AUDOUIN'S NIGHT-STALKING TIGER BEETLE**; Jared Hobbs **YELLOW-BREASTED CHAT, WESTERN TOAD**

INSIDE PAGES, SPECIES: Jared Hobbs **PAGES 1, 3, 4, 5, 7, 9, 12, 13, 14, 17, 18, 21, 25, 29, 33, 34, 37**; Jennifer Heron **6**; Jim Johnson **8**; Kristiina Ovaska **10**; Marianne Secrest **11**; Carl Gitscheff **16**; Damian Power, Wolfhound Wildlife Services **19**; Darren Copley **20**; Greg Wilson **22**; Orville Dyer **23, 27**; Brenda Costanzo **24, 31**; Erin Stoddard **26**; Trudy Chatwin **28**; Tanya Luszcz **30, 35**; Dave Fraser **32**; Andy Teucher **38**

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BACK COVER SPECIES (L–R): Jared Hobbs **PAINTED TURTLE**; Dave Fraser **SCOULER'S CORYDALIS**; Trudy Chatwin **PURPLE MARTIN**; Jared Hobbs **PALLID BAT**; Damian Power, Wolfhound Wildlife Services **WOLVERINE**

DESIGN: Arifin Graham, Alaris Design

UPLAND SANDPIPER

BRITISH COLUMBIA