

Managing for Species at Risk In Surrey - Opportunities & Challenges

SCCP Conservation Connections
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- Surrey's biodiversity conservation continuum
- Species at Risk in Surrey (the 'known knowns, known unknowns and unknown unknowns')
- Priority Places & Advancing SAR BMPs on City parkland
- Applying SAR protection in Surrey - Audouin's Night Stalking Tiger Beetle

Species at Risk in B.C.

2016

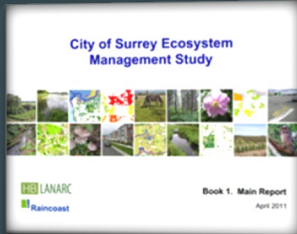
FIELD GUIDE



Surrey's Biodiversity Conservation Continuum



- 2014 Biodiversity Conservation Strategy
- OCP amended to include new Development Permit Area 3 - Sensitive Ecosystems



- 2011 Ecosystem Management Study
- Green Infrastructure Network defined



2016 Sensitive Ecosystem Development Permit Area Guidelines (Watercourses + GIN)



2019-2020 iNaturalist & City Nature Challenge



2020-2021 Biodiversity Design Guidelines

BCS Linkages



2021 GIN Development Cost Charge



2021-2022 Parkland in Surrey's ALR - A Comprehensive Plan for Agriculture

- Pollinator Partnership Certification
- Rodenticide transition

2023

- Local Government Climate Action Program pilot (Mound Farm Park)
- Pollinator Conservation website
- BCS Hubs Species at Risk Assessment & BMPs project
- Boulevard & yard rewilding guidelines



Species at Risk in Surrey

Known Occurrence	Number of Species	Critical Habitat
Endangered	4	3
Threatened	7	4*
Special Concern	16	N/A
Total	26	7

*Dun Skipper (butterfly) found nearby in Burns Bog but not confirmed for Surrey

Potential and or Historical/Incidental Occurrence (includes extirpated)

Status	Number of Species
Endangered	39
Threatened	14
Special Concern	21
Total	73

=99

and likely more
to be listed or
identified

Oregon Forestsnail



Salish Sucker



Pacific Water Shrew



Streambank Lupine



Dun Skipper



Western Painted Turtle



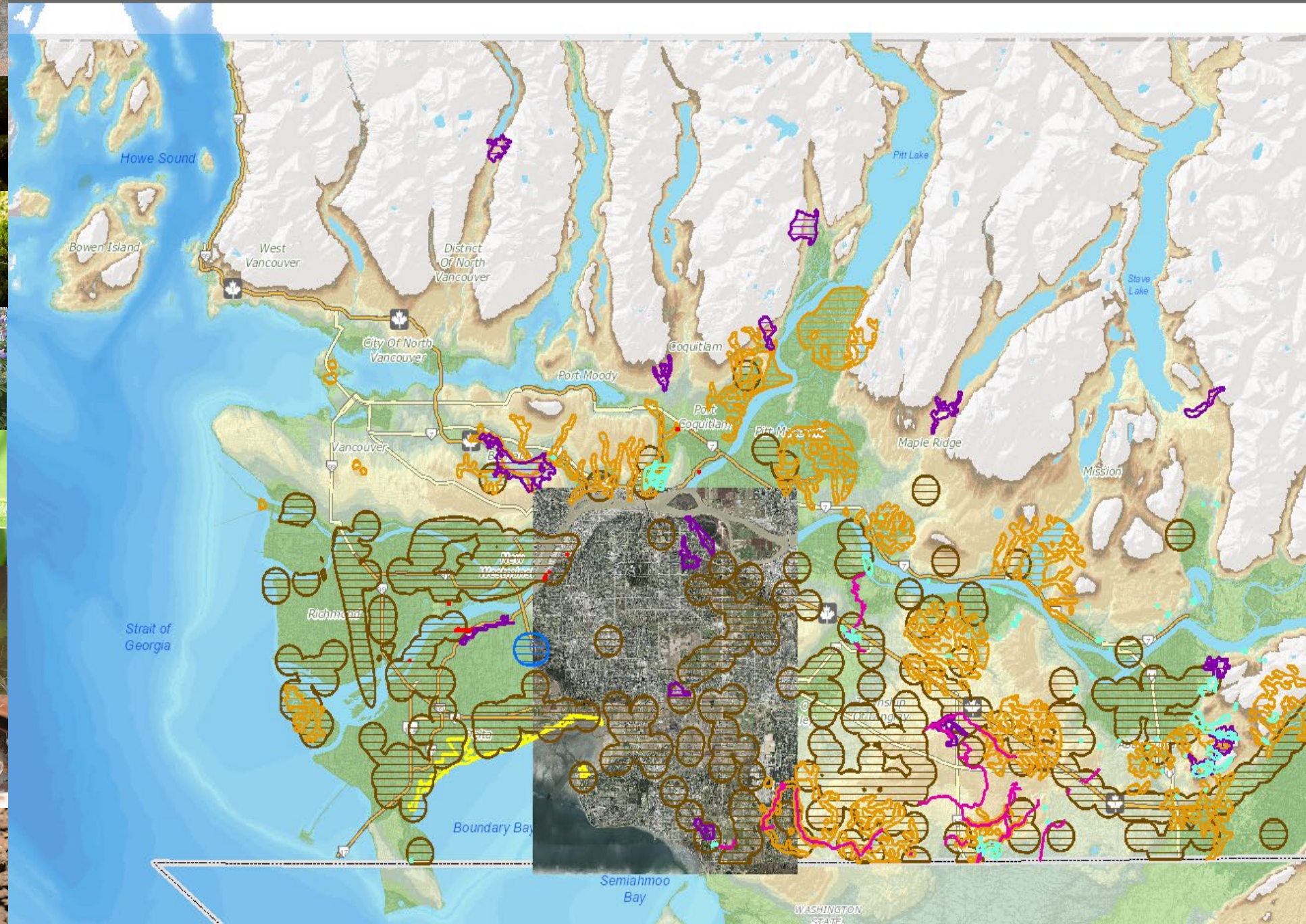
Barn Owl



Night Stalking Tiger Beetle



Type here to search for a layer or feature



Priority Places & Advancing SAR BMPs on City parkland

As part of the Pan-Canadian approach to transforming species at risk conservation in Canada, a total of 11 priority places were affirmed by federal, provincial and territorial governments in December 2018.

The places selected have significant biodiversity, concentrations of species at risk, and opportunities to advance conservation efforts.

In each priority place, the federal and provincial or territorial governments are working with Indigenous Peoples, partners and stakeholders to develop conservation action plans.



Pilot Project: Managing for Species at Risk and critical habitat in Surrey's Biodiversity Hubs

- Multi-species approach to assess SAR/CH potential for biodiversity hubs (wholly or partially owned by Surrey).
- Develop general, and where relevant, species-specific BMPs for the City for long-term management and monitoring of each hub.
- Identify opportunities for enhancement and recovery actions from a multi-species as well as species-specific approach.
- Restore SAR habitat on select sites.

HUBS (large natural areas >10ha)	Corridors
<ul style="list-style-type: none">Provides habitat for a diversity of species (May contain regionally important habitat)	<ul style="list-style-type: none">Local - 10-50 metres, Regional 50m>
<ul style="list-style-type: none">Source areas for wildlife dispersal	<ul style="list-style-type: none">Connectivity for species more tolerant of disturbance (e.g. "urban adapters")
<ul style="list-style-type: none">Provides interior (core) habitat and refuge areas	<ul style="list-style-type: none">Greenways through developed areas, utility rights of way
<ul style="list-style-type: none">Supports species with larger home ranges	<ul style="list-style-type: none">Connect smaller sites e.g. fragmented habitat
<ul style="list-style-type: none">Refuges for species less tolerant of disturbance	<ul style="list-style-type: none">Riparian corridors



Applying SAR protection in Surrey - Audouin's Night Stalking Tiger Beetle



Image: Andy Teuche

- When there is a lack of political will, all we can do is lean on legislation.
- We can only go as far as the existing legislation says we must.
- When land and development costs are so expensive, low economic returns impede accommodating environmental stewardship objectives

Example Critical Habitat Map

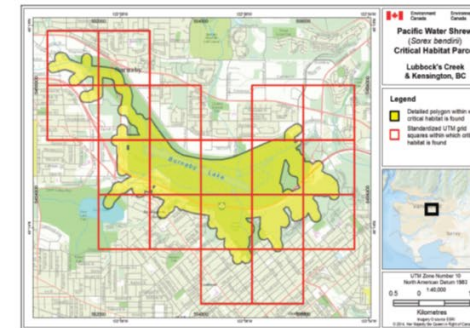


Figure A.5. Area within which critical habitat occurs for Pacific Water Shrew at River Road and 80th Street (Delta, B.C.). Critical habitat is represented by the shaded yellow polygons where the criteria set out in Section 5.1. are met. The 1 km x 1 km UTM grid overlay shown on this figure is a standardized national grid system that highlights the general geographic area containing critical habitat.

What does it mean to have critical habitat on your land?

It may mean that your current land use is compatible with the needs of the species.

If you plan to change how you use your land, you can get advice from species experts in order to avoid harming species or their habitat.





Case Study - Foreshore Enhancement Project & Audouin's Night-Stalking Tiger Beetle

- ▶ Wildlife Act [RSBC 1996, c. 488, S. 7]: It's an offence to alter, destroy, or damage wildlife habitat, except when a permit is issued. While not directly protecting invertebrates, this act protects designated Wildlife Management Areas for the benefit of regionally to internationally significant fish and wildlife species or their habitats.
- ▶ Species at Risk Act (SARA) [SC 2002, c. 29]: This species is designated as Threatened in Schedule 1 of SARA. As the beetle is not a migratory bird or aquatic species, and the occurrence is not on federal land, prohibitions of SARA (automatic protection) does not apply. SARA does allow for the federal minister to issue an order should provincial / territorial legislation or voluntary ("effective protection") measures be deemed inadequate to protect the species and its residence.

Project Triggers - Big Enough Teeth?

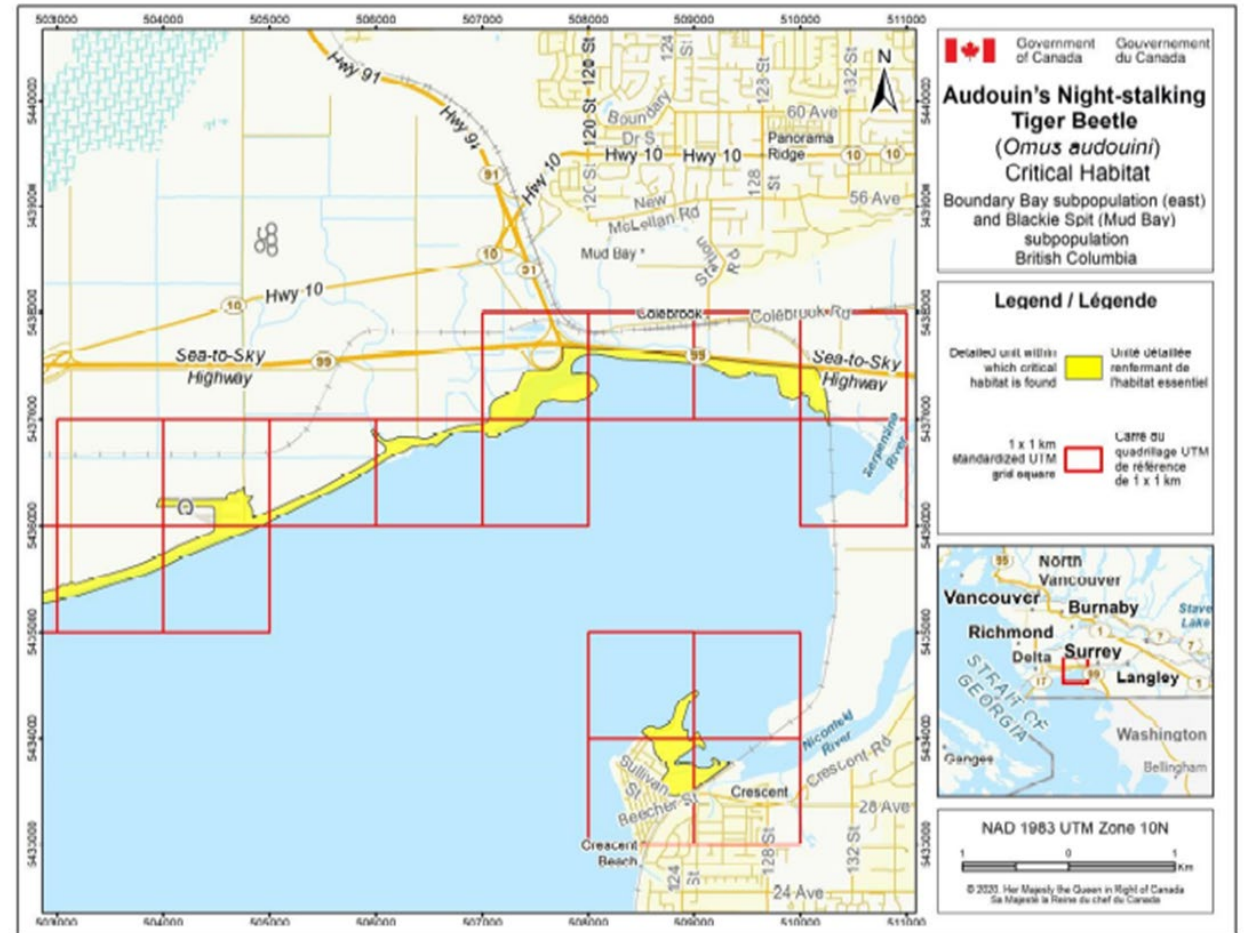
- BC Environmental Assessment Act - Public comment period
- The project was specifically identified as a threat (medium-low) to *O. audouini* in the recovery strategy (ECCC 2022).
- Cause of Threat: shifts in sediment resulting from the project may impact larval burrow habitat and adult foraging opportunities.
- Proposed Solution: there may be enough time between dike work that the population can adjust to the gradual habitat manipulation (thin layer placement). More study is needed (ECCC 2022).



Memorandum of Understanding (MOU) - Wildlife Management Area (WMA)

- This area is foreshore and typically would be managed per DFO, but the project is restoration and does not trigger an Authorization. However, the site is actually in the WMA.

*The only legislative 'hook' that can force the project to mitigate for the beetle is the WMA MOU via Ministry of Water, Land and Resource Stewardship





Questions?

surrey.ca/biodiversity