Category	Subcategory	Title	Description	Primary Contact Type (Dept, Branch, Ministry, FN, Other)
Wildlife	Terrestrial	Boreal Burns ARU Data	Acoustic recordings of breeding birds and other calling wildlife (e.g. amphibians) from automated recording units (ARUs) located in a randomly-dispersed selection boreal burns (1-20 years post-fire), across a central-western sub-region of Ontario's Far North. Acoustic interpretations of the dawn and dusk bird community are available. Targeted interpretation was also done to characterize temporal patterns of common nighthawk and olive-sided flycatcher.	ECCC-CWS
Wildlife	Terrestrial	Boreal Colonial Waterbird Surveys	Aerial and Boat Surveys of Boreal Lakes in Northwestern Ontario for Colonial Waterbirds and other incidental species nesting at these locations.	ECCC-CWS
Wildlife	Terrestrial	Boreal Lake Water Clarity	Water Clarity Raster derived from LandSat Imagery of Boreal Lakes.	ECCC-CWS
Wildlife	Terrestrial	Boreal Wetland Bird Surveys ARU Data	Acoustic recordings from ARUs located in a randomly-dispersed selection of boreal wetlands, across a central-western sub-region of Ontario's Far North. Acoustic interpretations of the dawn and dusk bird community and DIY air photos taken by helicopter pilot and used to quanitfy habitat composition are available.	ECCC-CWS
Wildlife	Terrestrial	Hudson Bay Lowlands Shorebird Survey 2005	Pilot study to test aerial survey methods for generating breeding shorebird population indices. All wildlife observed was recorded in addition to breeding shorebirds	ECCC-CWS
Wildlife	Terrestrial	Lesser Yellowlegs Tracking Project	Listed below are the studies four primary activities. 1. Deploy GPS Argos PinPoint and geolocator tags on breeding adults to identify migratory timing and routes, including key stopover sites and wintering locations utilized by individual Lesser Yellowlegs within sub-populations in Alaska and Canada. 2. Individually mark and resight individual Lesser Yellowlegs to estimate apparent annual survival rates. 3. Collect biological samples to examine potential genetic variation in sub-populations of Lesser Yellowlegs. 4. Collect information on reproductive rates of Lesser Yellowlegs to better understand nest and brood survival, and juvenile recruitment.	ECCC-CWS

Wildlife	Terrestrial	James Bay Shorebird Project	A partnership to survey southbound staging shorebirds. This work initially included surveys at sites known to support staging shorebirds, with an emphasis on Red Knot (C. canutus rufa) to enable identification of critical habitat, as well as surveys for two federal Species at Risk, the Yellow Rail (Coturnicops noveboracensis) and Short-eared Owl (Asio flammeus). Additional work to collect natural heritage information has been conducted in concert with more recent surveys. Currently, the project involves annual surveys of shorebirds staging at established survey sites along the southwestern coast of James Bay. The goals of the project are to: • Produce reliable estimates of shorebird species staging along the south-western James Bay coast; • understand local and flyway scale movement patterns of shorebirds staging in James Bay; and • identify sites and habitats needed to sustain staging shorebirds. The objectives to meet these goals are to estimate the: • variability in shorebird migration phenology (both annually and among species); • length of stay of staging shorebirds; • annual variation in the abundance of staging shorebirds; • habitat and food resource availability for staging shorebirds; and • minimum proportion of the global Red Knot, subspecies rufa, population that uses the southwestern James Bay coast.	ECCC-CWS
Wildlife	Terrestrial	Migrant Waterfowl Surveys Data	Migrant Waterfowl Surveys provide periodic data on spring- and fall-migrant waterfowl abundance, spatial and temporal distributions, and use along the shorelines of the Great Lakes and Hudson / James Bay in Ontario. Surveys for waterfowl and other non-target avian species (shorebirds, gulls, waterbirds, etc.) have been conducted between spring and fall along the Ontario coastline and nearshore waters of Hudson & James Bay (Spring 1977, 1978, 1990 & 1995; Summer 1977 – 1979, 1985, 1990, 1991, 1995, & 1997; Fall 1976 – 1981, 1990 – 1995, 1998 & 2001).	ECCC-CWS
Wildlife	Terrestrial	Hudson Bay & James Bay Moulting Scoter Surveys	Aerial-photographic survey of scoters (primarily male black scoter) along the Hudson Bay Coastline of Ontario.	ECCC-CWS
Wildlife	Terrestrial	Southern Hudson Bay Population Canada Geese Breeding Ground Surveys	Aerial transect-based survey of Canada Geese within the Hudson / James Bay Lowlands (incl. Akimiski Island, Nunavut) of Ontario and Manitoba. Formerly individual surveys for former SJBP, MVP and EPP Canada Goose Populations. Survey design has been altered over time as goose populations were amalgamated for management purposes. Most recent survey design change in 2016.	ECCC-CWS

Wildlife	Terrestrial	The SDJV Atlantic & Great Lakes Sea Duck Migration Study - LTDU Satellite Telemetry Data	Satellite telemetry data from Long-tailed Duck captured at Lake Ontario and tracked throughout their annual cycle (winter, spring/fall staging and breeding locations).	ECCC-CWS
Wildlife	Terrestrial	Cape Henrietta Maria Snow Goose Colony Surveys	Aerial photo survey of Snow Geese pairs / nests at Cape Henrietta Maria on Hudson Bay Coastline of Ontario.	ECCC-CWS

Ownership	Partners	Format	External Link (if applicable)	Parameters	Spatial Coverage	Time Period - Start
ECCC-CWS		Excel	NA	estimated counts of individuals by bird species	central-western sub-region of Ontario's Far North	2012
ECCC-CWS		Excel	NA	Habitat availability and breeding waterbird counts	central-western sub-region of Ontario's Far North including Lake St. Joseph	2010
CWS-contractor		Raster	NA			2014
ECCC-CWS		Excel, jpeg	NA	estimated counts of individuals by bird species, geo-referenced air photos	central-western sub-region of Ontario's Far North	2013
CWS-partnership	OMNRF	Excel	NA	Numbers of shorebirds	Hudson Bay lowlands	2005
CWS-partnership	OMNRF	Other	NA	migration tracks, annual survival rates	sites across Canada and Alaksa including James Bay	2018

CWS-partnership	OMNRF, Royal Ontario Museum, ECCC-STB	MS Access database	NA	estimated counts of shorebird individuals by species, tag detections and flag resightings, bird banding data, effort data, incidental species sightings, red blood cell inventory,	James Bay coast	2009
CWS-partnership	OMNRF (Northern sites), Birds Canada	MS Access database	NA	Counts or visual estimates of individuals in flocks.	Great Lakes & Hudson and James Bay coastlines of Ontario.	1968
CWS-partnership	OMNRF	Excel	NA	Counts or visual estimates of individuals in flocks.	Hudson and James Bay coastline (0 - 15 km offshore) of Ontario.	1977
CWS-partnership, MNRF holds data	Mississippi Flyway States & Provinces & USFWS; Ontario component of Sureys = OMNRF.	Excel	NA	Counts or visual estimates of individuals.	Hudson / James Bay Lowlands and coastline of Ontario, Akimiski Island and Manitoba.	1989

CWS-partnership	Mutiple Sea Duck Joint Venture Partners (Overall Study); Ontario LTDU Component = Birds Canada.	Excel	NA	Satellite-telemetry based location data	Atlantic coastline of USA, USA/CDN Great Lakes region and Hudson / James Bay and eastern Arctic Canada.	2011
CWS-partnership	OMNRF	Excel	NA	Counts or visual estimates of individuals (pairs) or nests.	Cape Henrietta Maria snow goose colony in Polar Bear Provincial Park along the Hudson and James Bay coastlines of Ontario.	1969

Time Period - End	Status	Study Objectives
2012	complete	characterize breeding bird community of boreal burns; model temporal patterns of common nighthawk and olive-sided flycatcher
2012	complete	Population and distribution surveys of colonial waterbirds in the boreal forest
2014	complete	
2013	complete	characterize breeding bird community of sedge-dominated boreal wetlands, document habitat conditions at time of bird sampling
2005	complete	develop methods to estimate breeding density of shorebird species in peatland habitat
2019	ongoing	The study aims to fill knowledge gaps and investigate the causes of declines fo Lesser Yellowlegs, which includes unregulated hunting on wintering grounds.

present	ongoing variable	The overall objective of the project is to contribute to shorebird population assessments and conservation, site designations and protection (e.g. Important Bird Area and WHSRN), and species recovery and protection (e.g. Endangered rufa Red Knot , other declining shorebirds).
ongoing	ongoing periodic	Abundance and distribution of migrant waterrfowl along coastlines of Ontario.
2013	complete	Abundance and distribution of moulting scoters along Hudson / James Bay coastline of Ontario.
ongoing	ongoing annual	Abundance and distribution of breeding population of Canda Geese nesting in the Hudson / James Bay Lowlands of Ontario.

2012	complete	Track migration movements and seaosonal habitat use of Sea Ducks (Long-tailed Duck, Black Scoter, Surf Scoter and White-winged Scoter) in eastern North America.
2019	ongoing periodic	Abundance (pair / nests) and distribution of nesting snow geese at Cape Henrietta Maria.

Method
ARUs deployed in late May; retrieved in mid-September. Recording schedule June 1 through mid-August, with regular dawn and dusk periods, plus nocturnal periods.
Aerial and boat surveys
ARUs deployed in late May; retrieved in mid-September. Recording schedule June 1 through mid-August, with regular dawn and dusk periods, plus nocturnal periods. DSLR mounted vertically to floor of helicopter cabin, aimed orthogonally to the ground through the pilot's long-line window. Pilot hovered at 2,000' a.g.l. above each ARU station, and captured several photos using a remote trigger.
Helicopter aerial survey of counts within fixed width strip transects geese (indivduals & nests) along transects.
GPS Argos PinPoint and geolocator tags

ground and aerial-based flock counts, re-sighting of nmarked birds, MOTUS
Cruise-style aerial survey conducted within survey sectors where visual estimation is used to determine abundane of waterfowl species (and other waterbird species).
Cruise-style survey along coastline (0 - 15 km offshore) using aerial photographic and visual estimation methods to determine abundance and distribution of moulting scoters (primarily Black Scoter).
Fixed-wing aerial survey of visual estimates / counts of Canada Geese (and other waterfowl / other incidental avian species) within fixed width strip transects geese (indivduals & nests) along transects.

Satellite telemetry tracking of individuals captured at wintering area in eastern North America (Great Lakes / Lake Ontario, US Atlantic Coast).
Aerial survey of visual estimates / counts or photo counts of snow geese (indivduals & nests) along transects.