

Land Information Ontario Data Description

Species Monitored Subject Tracking Point

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LIO Class Catalogue

Species Monitored Subject Tracking Point

Class Short Name: SPEMONPT

Version Number: 1

Class Description:

The location of a monitored species subject at a particular date and time. For example, a caribou fitted with a Global Positioning System (GPS) collar will have its progress along the landscape recorded as point locations in this geospatial layer.

Abstract Class Name: SPSPNT

Abstract Class

Description:

Spatial Single-Point: An object is represented by ONE and ONLY ONE point. Examples: A cabin, bird nest, tower.

Tables in LIO Class:

Species Monitored Subject Tracking Point

SPECIES_MONITORED_SUBJ_TRK_FT

The location of a monitored species subject at a particular date and time. For example, a caribou fitted with a Global Positioning System (GPS) collar will have its progress along the landscape recorded as point locations in this geospatial layer.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
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System-generated object identifier, unique at the application level.

SPECIES_MON_SUBJECT_SETUP_ID	NUMBER (13,0)	Yes	SETUP_ID	
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Foreign Key to the parent Species Monitored Subject Setup table record that this feature is associated with. The reference is used to identify the species subject equipped with a tracking device. ----- System-generated object identifier, unique at the application level.

SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	17296, 180719, 180720, 180729, 180740, 180742, ... (See SPECIES_MONITORED_SUBJECT_LIST table)
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Foreign Key to the parent Species Master List table record that identifies the target species. ----- A business value that uniquely identifies a specific species, or an assemblage of species such as vegetation communities and wildlife concentration areas according to a recognized standard within Natural Heritage Information Centre (NHIC) databases. - ---- NHIC database: ELEMENT_SUBNATIONAL_ID

SPECIES_PROJECT_ID	NUMBER (13,0)	No	PROJ_ID	
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Foreign Key to the parent Project table record that this feature is associated with. --- System generated identifier, unique at the application level.

ARGOS_ACCURACY_CODE	VARCHAR2 (1)	No	ARGOS_ACC	0, 1, 2, 3, A, B, Z
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An Advanced Research and Global Observation Satellite (ARGOS) system generated code that identifies the accuracy of the recorded location. ----- Valid values are: 0,1,2,3,A,B,Z whereas: 0 - >1000m 1 - <1000m 2 - <350m 3 - <150m A - accuracy not estimated B - accuracy and frequency not estimated Z - unvalidated

PDOP_ERROR	NUMBER (5,2)	No	PDOP_ERROR	
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The Position Dilution of Precision (PDOP) accuracy recorded at the time of data acquisition. The value represents the calculated likelihood of positional error based on the present position of the satellites being tracked, represented as a unit-less measure. The value includes horizontal and vertical error. For example: 1.2, 3.4, 2.6. etc.

MONITOR_DATETIME	DATE	No	MONITOR_DT	
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The date and time of an observation for an animal that is being monitored by various means, such as a radio collar. For example: 2007/05/23 13:55:34 (year/month/day hour:minute:second). Note: Time values of ARGOS collars represent Greenwich mean time.

SENSITIVITY_CLASS	VARCHAR2 (15)	Yes	SENS_CLASS	
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The ranking of the sensitivity of the information embodied in the feature. Often wide-spread knowl edge of the location of some rare aspect of our natural heritage will endanger it. On the other han d, this knowledge by some parties is also extremely important for its protection. High - informatio n that is extremely sensitive and intended for use by named individuals only. Refers to information that could have negative impacts on human life or health if released. Currently no data classes me et this Medium - information that is sensitive and intended for use only by specified groups of employees an d approved agents of the Crown. For OLIW/NRVIS refers to information where the entire data type has

been flagged as sensitive (i.e. Stick Nests for Vulnerable Threatened and Endangered (VTE) species) Low - information generally available to employees and approved agents of the Crown. Refers to sensitive features within a data type not normally sensitive (i.e. specific instances of Pileated Wood pecker) Non-Sensitive - data and information that does not fall into any of the three sensitivity levels. If disclosed will not result in any injury to individuals, government or private sector institutions (i.e. base data).

SENSITIVITY_RATIONALE	VARCHAR2 (50)	Yes	SENS_RAT
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The primary reason for the information sensitivity classification. Examples: "VTE Species", "Data Provider Agreement", "No Restriction Needed" (for Non-Sensitive data), "Protect Feature Type", "Protect Single Feature", "Legislative or Legal Req't", "Cultural Heritage Site", "Other". Note: For Species at Risk (SAR) features, please use "Legislative or Legal Req't" as a rationale.

GEOMETRY_UPDATE_DATETIME	DATE	No	GEO_UPD_DT
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Date/time the geometry was created or last modified in the source database.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

SPECIES_MASTER_LIST

A master listing of all Ontario fauna and flora that are of interest to the Ontario Ministry of Natural Resources. A unique Element Id is assigned to each element that identifies either: - a specific species / subspecies / variety. - a grouping or category of species e.g. at the Family or Genus level. Where applicable, various element significance rankings (e.g. Sensitivity, Provincially Tracked, COSEWIC Status, SARA Status etc.) are included in this master list. --- Note: The Species Master List is used exclusively by NRVIS / LIO and is derived and updated from the Natural Heritage Information Centre master species listings.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID
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A business value that uniquely identifies a specific species, or an assemblage of species such as vegetation communities and wildlife concentration areas according to a recognized standard within Natural Heritage Information Centre (NHIC) databases. ----- NHIC database: ELEMENT_SUBNATIONAL_ID

ELCODE	VARCHAR2 (254)	No	ELCODE
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Assigned by NatureServe, the value in this field can be used to filter out species groupings such as bird species, fish species etc. These codes change as the species classification changes, and should not be used as a long-term species code. For a unique species ID, Element ID should be used. ----- NHIC database field: ELCODE

SCI_NAME	VARCHAR2 (254)	Yes	SCI_NAME
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The scientific name of the organism which identifies the genus and species. ----- NHIC database field: SCI_NAME

COM_NAME	VARCHAR2 (75)	No	COM_NAME
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The common name assigned to a species, a group of species, or a community. The common name may describe category levels such as species, subspecies, hybrids, varieties, families, genus, and communities. Note: As the common name may be generically described, users should also refer to the Scientific Name to ensure that the proper master species list record is selected and / or associated to. ----- NHIC database field: COM_NAME

TAXON_GROUP	VARCHAR2 (40)	No	TAXON_GRP
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The taxon group reference assigned to an element by the Natural Heritage Information Centre (NHIC). For example "Fish", "Amphibians", "Birds", "Trees", "Shrubs" etc.

REC_SENSITIVITY_CLASS	VARCHAR2 Yes (15)	REC_SENS	Low, Medium, Non-Sensitive
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Identifies the recommended Data Sensitivity Class for a species that should be applied by the user for any associated feature e.g. observations. The Sensitivity Classes are Low, Medium and Non-Sensitive. ----- Note-1: Data protection for an identified species is normally applicable for mapped features pinpointing a narrow geographical area vs. a generalized area. For example, access to the spatial and attribute data for a SAR nesting site location would be controlled, whereas a mapped Habitat Range for the same species would not require the same level of data protection as it covers a large geographical area. --- Note-2: the recommended sensitivity for a species will be displayed to the user when they choose a species from the Species Master List. It will up to the discretion of the editor to manually flag the feature with the appropriate sensitivity class.

NHIC_TRACKED_IND	VARCHAR2 No (1)	NHIC_TRACK	Y, N,P
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A "Yes" or "No" indicator assigned by NHIC if the identified species is provincially tracked or not. --- The value is stored as a single character where: Y = Yes N = No ----- Note: Species identified as being Provincially Tracked are assigned an MNR Sensitivity Ranking of "Medium" to control data access and security associated with the precise-scale mapped locations of features e.g. Bald Eagle Nesting Site. ----- NHIC database field: TRACKED

NHIC_SENSITIVE_IND	VARCHAR2 No (1)	NHIC_SENS	Y, N
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A "Yes" or "No" indicator assigned by NHIC if the identified species is assigned a higher sensitivity within the listing of rare and / or at risk species e.g. Ginseng, Wood Turtle. ----- The value is stored as a single character where: Y = Yes N = No ----- Please refer to the NHIC website for current standards relating to the use of species and individual element occurrences marked as sensitive. ----- NHIC database field: SENS_IND

MNR_INVASIVE_IND	VARCHAR2 No (1)	MNR_INVAS	Y, N
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A "Yes" or "No" indicator if a species is considered "invasive" by the Ontario Ministry of Natural Resources (OMNR), including invasive species, meaning it is having a destructive effect on other native species within its habitat. This indicator is maintained by Natural Heritage Information Centre (NHIC) staff. ----- The value is stored as a single character where: Y = Yes N = No ----- NHIC database field: PEST

COSEWIC_STATUS	VARCHAR2 No (15)	COSEWIC	
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A COSEWIC (Committee on the Status of Endangered Wildlife in Canada) status is the result of a detailed assessment of the status of a species. A COSEWIC status identifies whether or not a species is at risk of becoming extinct nationally. Species at risk are those designated as Endangered or Threatened. ----- Visit <http://www.cosewic.gc.ca/> for additional information about COSEWIC. ----- The COSEWIC Status is represented as a code in this field, explained as follows: Extinct (X) - A wildlife species that no longer exists. --- Extirpated (XT) - A wildlife species that no longer exists in the wild in Canada, but exists elsewhere. --- Endangered (E) - A wildlife species facing imminent extirpation or extinction. --- Threatened (T) - A wildlife species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction. --- Special Concern (SC) - A wildlife species that may become threatened or endangered because of a combination of biological characteristics and identified threats. --- Data Deficient (DD) - A category that applies when the available information is insufficient (a) to resolve a wildlife species' eligibility for assessment or (b) to permit an assessment of the wildlife species' risk of extinction. --- Not At Risk (NAR) - A wildlife species that has been evaluated and found to be not at risk of extinction given the current circumstances. --- Note: Some values may be combined within the same field. ----- NHIC database field: COSEWIC

COSEWIC_STATUS_DATE	DATE No	COSEWIC_DT	
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The date that the COSEWIC Status is effective. ----- NHIC database field: COSEWIC_DATE

COSEWIC_COMMENTS	VARCHAR2 No (254)	COSEWIC_CO	
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Comments about the currently assigned COSEWIC Status. ----- NHIC database field: COSEWIC_COM

SARA_SCHEDULE_STATUS	VARCHAR2 No	SARA_SCHED	
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(15)

The status assigned to a species by the Federal Government Species at Risk Act (SARA). The SARA Status is stored as a code in this field whose values include: E = Endangered SC = Special Concern T = Threatened XT = Extirpated ----- NHIC database field: SARA_SCHD_1_STATUS

SARA_STATUS_DATE	DATE	No	SARA_DATE
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The date that the Federal Species at Risk Act (SARA) Status is effective. ----- NHIC database field: SARA_STATUS_DATE

SUBNATIONAL_RANK_CODE	VARCHAR2	No	SRANK_CODE
	(15)		

Ontario Sub-National rank maintained by the Natural Heritage Information Centre (NHIC). Provincial (or Sub-National) ranks are used by the Natural Heritage Information Centre to set protection priorities for rare species and natural communities. These ranks are not legal designations. Provincial ranks are assigned in a manner similar to that described for global ranks, but consider only those factors within the political boundaries of Ontario. By comparing the global and provincial ranks, the status, rarity, and the urgency of conservation, needs can be ascertained. ----- The NHIC evaluates provincial ranks on a continual basis and produces updated lists at least annually. ----- The Sub-National Rank codes and definitions are as follows: --- SX = Presumed Extirpated - Species or community is believed to be extirpated from the nation or state/province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered. --- SH = Possibly Extirpated (Historical) - Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years. A species or community could become NH or SH without such a 20-40 year delay if the only known occurrences in a nation or state/province were destroyed or if it had been extensively and unsuccessfully looked for. The NH or SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences. --- S1 = Critically Imperilled - Critically imperilled in the nation or state/province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state/province. --- S2 = Imperilled - Imperilled in the nation or state/province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state/province. --- S3 = Vulnerable - Vulnerable in the nation or state/province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation. --- S4 = Apparently Secure - Uncommon but not rare; some cause for long-term concern due to declines or other factors. --- S5 = Secure - Common, widespread, and abundant in the nation or state/province. --- SNR = Unranked - Nation or state/province conservation status not yet assessed. --- SU = Unrankable - Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. --- SNA = Not Applicable - A conservation status rank is not applicable because the species is not a suitable target for conservation activities. --- S#S# = Range Rank - A numeric range rank (e.g., S2S3) is used to indicate any range of uncertainty about the status of the species or community. Ranges cannot skip more than one rank (e.g., SU is used rather than S1S4). ----- Description Source: NHIC Glossary ----- NHIC database field: S_RANK

SUBNATIONAL_RANK_CHANGE_DATE	DATE	No	SRANK_DATE
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The effective date that the Subnational Rank was changed by NHIC for a species. ----- NHIC database field: S_RANK_CHANGE_DATE

SUBNATIONAL_RANK_REVIEW_DATE	DATE	No	SRANK_REV
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The date that the Subnational Rank was reviewed by NHIC. ----- NHIC database field: S_RANK_REVIEW_DATE

SUBNATIONAL_RANK_REASON	VARCHAR2	No	SRANK_REAS
	(254)		

The reason documented by NHIC for the assigned Subnational Rank. ----- NHIC database field: S_RANK_REASONS

SARO_STATUS	VARCHAR2	No	SARO_STAT
	(15)		

If a species is classified "at risk" by the Committee on the Status of Species at Risk in Ontario, they are added to the Species at Risk in Ontario(SARO) list in one of the following four categories, depending on the degree of risk: EXP = EXTIRPATED - a native species that no longer exists in the

wild in Ontario, but still exists elsewhere (e.g. Greater Prairie Chicken) --- END = ENDANGERED - a native species facing extinction or extirpation (e.g. Cucumber Tree) --- THR = THREATENED - a native species at risk of becoming endangered in Ontario (e.g. Fowler's Toad) --- SC = SPECIAL CONCERN - a native species that is sensitive to human activities or natural events which may cause it to become endangered or threatened (e.g. Monarch Butterfly).

SARO_STATUS_DATE	DATE	No	SARO_DATE
The calendar date that is applicable to the current Species At Risk in Ontario (SARO) status.			
SARO_STATUS_COMMENTS	VARCHAR2 (254)	No	SARO_COM
Comments relating to the current Species At Risk in Ontario (SARO) status.			
KINGDOM	VARCHAR2 (10)	No	KINGDOM
The classified Kingdom of the species: In biology, kingdom is a taxonomic rank above Phylum. Kingdom classifications are as follows: Moneira - Unicellular and colonial organisms, including the true bacteria and cyanobacteria. --- Protista ? Organisms with just one eukaryotic cell. --- Fungi ? Including mushrooms and other fungus. --- Plantae ? Including trees, grass and flowers. --- Animalia ? From snails, birds, reptiles, amphibians to mammals ----- NHIC database field: KINGDOM			
PHYLUM	VARCHAR2 (100)	No	PHYLUM
The classified Phylum of the species. In biology, phylum is a taxonomic rank below Kingdom and above Class. ----- NHIC database field: PHYLUM			
SUBPHYLUM	VARCHAR2 (100)	No	SUBPHYLUM
In biology, subphylum is a taxonomic rank intermediate between phylum and superclass. Not all organisms are assigned to a subphylum.			
CLASS_TAXON	VARCHAR2 (100)	No	CLASS_TX
In biology, class is a taxonomic rank between superclass and subclass. ----- NHIC database field: CLASS			
SUBCLASS	VARCHAR2 (100)	No	SUBCLASS
In biology, subclass is a taxonomic rank intermediate between class and infraclass.			
INFRACLASS	VARCHAR2 (100)	No	INFRACLASS
In biology, infraclass is a taxonomic rank intermediate between subclass and order.			
ORDER_TAXON	VARCHAR2 (100)	No	ORDER_TX
In biology, order is a taxonomic rank between infraclass and suborder. ----- NHIC database field: ORDER			
SUBORDER	VARCHAR2 (100)	No	SUBORDER
In biology, suborder is a taxonomic rank intermediate between order and infraorder.			
INFRAORDER	VARCHAR2 (100)	No	INFRAORDER
In biology, infraorder a taxonomic rank intermediate between suborder and superfamily.			
SUPERFAMILY	VARCHAR2 (100)	No	SUPERFAMIL
In biology, superfamily is a taxonomic rank intermediate between infraorder and family.			
FAMILY_ID	NUMBER	No	FAMILY_ID

(13,0)

The NatureServe Identifier assigned a each species nomenclature Family. ----- NHIC database field: FAM_ID

FAMILY	VARCHAR2	No	FAMILY
	(100)		

In biology, family is a taxonomic rank between superfamily and subfamily. ----- NHIC database field: FAMILY

FAMILY_NAME	VARCHAR2	No	FAMILY_NAM
	(20)		

A generic name to describe the family of a species. For example, the family: Aceraceae is described in this field as "maple family". ----- NHIC database field: FAM_NAME

SUBFAMILY	VARCHAR2	No	SUBFAMILY
	(100)		

In biology, subfamily is a taxonomic rank intermediate between family and tribe.

TRIBE	VARCHAR2	No	TRIBE
	(100)		

In biology, tribe is a taxonomic rank intermediate between subfamily and genus.

GENUS_ID	NUMBER	No	GENUS_ID
	(13,0)		

The NatureServe Identifier assigned a each species nomenclature Genus. ----- NHIC database field: GENUS_ID

GENUS	VARCHAR2	No	GENUS
	(100)		

In biology, genus is a taxonomic rank between tribe and subgenus. ----- NHIC database field: GENUS

GENUS_NAME	VARCHAR2	No	GENUS_NAME
	(100)		

A generic name to describe the Genus of a species. For example, the Genus: Rhus is described in this field as "sumac". ----- NHIC database field: GENUS_NAME

SUBGENUS	VARCHAR2	No	SUBGENUS
	(100)		

In biology, subgenus is a taxonomic rank intermediate between genus and species.

SPECIES	VARCHAR2	No	SPECIES
	(100)		

In biology, a species is a taxonomic rank between subgenus and subspecies.

SUBSPECIES	VARCHAR2	No	SUBSPECIES
	(100)		

In biology, subspecies is a taxonomic rank below species.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE
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Date/time that the record was expired from use.

SPECIES_MONITORED_SUBJECT_LIST

A short list of species that are applicable to this data class.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	0, 1000, 10000, 100000, 100002, 100004, ... (See SPECIES_MASTER_LIST table)
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Foreign Key to the parent Species Master List table record that identifies the target species. ----- A business value that uniquely identifies a specific species, or an assemblage of species such as vegetation communities and wildlife concentration areas according to a recognized standard within Natural Heritage Information Centre (NHIC) databases. ----- NHIC database:
ELEMENT_SUBNATIONAL_ID

SCI_NAME	VARCHAR2 (254)	Yes	SCI_NAME
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The scientific name of the organism which identifies the genus and species. ----- NHIC database field: SCI_NAME

COM_NAME	VARCHAR2 (75)	No	COM_NAME
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The common name assigned to a species, a group of species, or a community. The common name may describe category levels such as species, subspecies, hybrids, varieties, families, genus, and communities. Note: As the common name may be generically described, users should also refer to the Scientific Name to ensure that the proper master species list record is selected and / or associated to. ----- NHIC database field: COM_NAME

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

EXPIRY_DATETIME	DATE	No	EXP_DATE
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Date/time that the record was expired from use.

SPECIES_MONITORED_SUBJ_SETUP

Non-spatial Editable Table: This table stores information about a species subject being monitored, along with details of up to four monitoring devices that can be attached to the subject at one time.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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OGF_ID	NUMBER (13,0)	Yes	OGF_ID
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System-generated object identifier, unique at the application level.

SPECIES_OBS_DETAIL_ID	NUMBER (13,0)	No	OBS_DET_ID
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Foreign Key to the parent Species Observation Detail table record. ----- System generated identifier, unique at the application level.

IDENT	VARCHAR2 (20)	Yes	IDENT
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A unique identifier assigned to a monitored animal for the duration of the study i.e. "6533-2", "34968". This identifier is assigned as the same animal may be fitted with different tracking devices over the course of the study (e.g. to replace a malfunctioning collar).

SEX	VARCHAR2 (12)	Yes	SEX	Male, Female, Undetermined
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The sex of the subject species.

LIFE_STAGE	VARCHAR2 (15)	Yes	LIFE_STAGE	Adult, Egg, Young, Undetermined
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Identifies the life stage of the subject that is being set up for monitoring. ----- Note: the subject individual age can be documented in the Subject Age field.

AGE	VARCHAR2 (15)	No	AGE
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Free text field identifying the age of the subject (e.g. the number of years since birth) at the time of the monitoring setup. The age may be actual or estimated. Examples: - 5 years - GT 2 years - LT 1 year

HEALTH_DESCR	VARCHAR2 (1000)	No	HEALTH_D
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Free-form text about the health of the monitored species subject.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

SPECIES_MONITORING_DEVICE

Identifies the kind of instrument(s) or device(s) affixed to a species subject in order to monitor or identify it, such as ear bands, ear tags, VHF or GPS collar. The unique device identifier assigned by the business area or manufacturer is also documented in this table, along with dates associated with the monitoring period. ----- Rule: Up to 4 different devices may be affixed to a species subject.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SPECIES_MON_SUBJ_SETUP_ID	NUMBER (13,0)	Yes	SETUP_ID
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Foreign Key to the parent Species Monitored Subject Setup table record. --- System-generated object identifier, unique at the application level.

MONITORING_DEVICE_TYPE	VARCHAR2 (30)	Yes	DEVICE_T	ARGOS Satellite Collar, Band, Ear Tags, GPS Collar: GSM Technology, GPS Collar: Other, GPS Collar: Store on Board, ... (See SPECIES_MON_DEVICE_TYPE_LIST table)
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The kind of instrument that is affixed to the subject species in order to monitor or identify it. For example: Band, Ear Tags, VHF Collar, GPS Collar etc.

MONITORING_DEVICE_IDENT	VARCHAR2 (30)	Yes	DEVICE_ID
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The identifier that is assigned to a device by the manufacture or business area. It is used to positively identify the subject species for monitoring purposes. The identifier can be a number or a combination of alphanumeric characters. ----- Examples: - "65341", "3-475465" (collars) - "5REDLEFT 5BLUERIGHT" (ear tags) ----- Note: Coloured devices (i.e. ear tags) are often used as a quick method of identifying the sex of a monitored animal from a distance. For example, yellow ear tags are used to identify female wolverines, while red ear tags are reserved for males.

MONITORING_START_DATE	DATE	Yes	START_DATE
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The date when a monitoring device was activated on a species subject. Example: 2006/03/24 (year/month/day)

MONITORING_END_DATE	DATE	No	END_DATE
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The date when a monitoring device on a species subject was deactivated or ceased to function. Example: 2006/03/24 (year/month/day)

MONITORING_END_REASON	VARCHAR2 (60)	No	END_REASON
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A short description explaining why the monitoring ended. Examples: "Animal died", "Device removed", "Device inoperable", "End of Project".

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

SPECIES_MON_DEVICE_TYPE_LIST

Listing of valid monitoring device types that can be affixed to a subject species.

Column Name	Column Type	Mandatory	Short Name	Valid Values
MONITORING_DEVICE_TYPE	VARCHAR2 (30)	Yes	DEVICE_T	
The kind of instrument that is affixed to the subject species in order to monitor or identify it. For example: Band, Ear Tags, VHF Collar, GPS Collar etc.				
MONITORING_DEVICE_DESCR	VARCHAR2 (254)	Yes	DEVICE_D	
A short description of the monitoring device type.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				
EXPIRY_DATETIME	DATE	No	EXP_DATE	
Date/time that the record was expired from use.				

SPECIES_PROJECT

A project designed to collect observations of a particular species. Metadata identifying the parties involved and the start and end dates of a project is captured.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
System generated identifier, unique at the application level.				
PROJECT_NAME	VARCHAR2 (100)	Yes	PROJ_NAME	
Identifies the project associated with species data collection.				
PROJECT_START_DATE	DATE	Yes	START_DATE	
The date when the project began (YYYY-MM-DD).				
PROJECT_END_DATE	DATE	No	END_DATE	
The date when the project ended (YYYY-MM-DD).				
STATUS	VARCHAR2 (11)	Yes	STATUS	Completed, In progress, On hold, Planned
The current status of the project, whether it is planned, in progress, completed or on hold.				
LEAD_ORGANIZATION	VARCHAR2 (100)	Yes	LEAD_ORG	
The organization or organizational unit in which the data authority resides/reports and which has assumed accountability for the collection of the data (Typically this is an OMNR Program Area).				
PROJECT_SPONSOR	VARCHAR2 (100)	Yes	SPONSOR	
The Sponsor providing funding and direction for the project. Examples: Northern Boreal Initiative, Forest Management Values Data Collection, Species at Risk, Ontario Parks, Moose Survey, Research, Other (University/NGO).				
PROJECT_DATA_AUTHORITY	VARCHAR2 (100)	Yes	DATA_AUTH	
The full name of the person who knows how the data was collected for the project. ----- Entries should be made using standard form (Last Name, comma, First Name) e.g. Doe, John. Additional alternate names should be separated by a semi-colon e.g. Doe, John; Doe, Jane. ----- To comply				

with the Freedom of Information and Protection of Privacy Protection Act (FIPPA) guidelines, the names included in this field should only be used to identify persons working in a professional capacity for, or on behalf of the Ontario Ministry of Natural Resources (OMNR).

GENERAL_COMMENTS	VARCHAR2 (2000)	No	GNL_CMT
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General comments.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

SPECIES_PROJECT_DOCUMENT_REF

Intersect table between Project and Document Reference tables. It permits the association of several different document references to a feature.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SPECIES_PROJECT_ID	NUMBER (13,0)	Yes	PROJECT_ID	
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Foreign Key to parent Species Project table record. ----- System generated identifier, unique at the application level.

SPECIES_DOCUMENT_REFERENCE_ID	NUMBER (13,0)	Yes	DOC_REF_ID	
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Foreign Key to the parent Species Document Reference table record. ---- System generated identifier, unique at the application level.

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
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Date/time the record was created or last modified in the source database.

LIO Lookup Table Values:

SPECIES_MONITORED_SUBJECT_LIST

SPECIES ELEMENT ID	SCI NAME	COM NAME	EXPIRY DATETIME
17296	Canis lupus occidentalis	Northern Gray Wolf	
180719	Ursus americanus	American Black Bear	
180720	Ursus maritimus	Polar Bear	
180729	Gulo gulo	Wolverine	
180740	Cervus canadensis	Elk	
180742	Alces americanus	Moose	
220562	Rangifer tarandus caribou	Woodland Caribou (Forest-dwelling boreal population)	

LIO Lookup Table Values:

SPECIES_MON_DEVICE_TYPE_LIST

MONITORING DEVICE TYPE	MONITORING DEVICE DESCR	EXPIRY DATETIME
ARGOS Satellite Collar	A collar that uses the Advanced Research and Global Observation Satellite (ARGOS) data collection system to collect positional data.	
Band	A band with some form of identification affixed to a subject species, e.g. on the leg of a bird.	
Ear Tags	Tags with some form of identification affixed to one or both ears of a species subject.	
GPS Collar: GSM Technology	Global Positioning System (GPS) collar with remote download via the Global System for Mobile Communication (GSM). The GSM system is used to transmit fix data positions of the collar (estimated by the GPS engine inside the collar) to a device.	
GPS Collar: Other	Global Positioning System (GPS) collar that utilize Argos, UHF, GSM and/or Iridium technology to access the data remotely while the collar is operational.	
GPS Collar: Store on Board	Global Positioning System (GPS) collar which allow for the storage of GPS locations in a memory on board the collar. The collars must be physically recovered to download the data.	
GPS Collar: Uplink via ARGOS	Global Positioning System (GPS) collar which allow for data transmission of GPS locations through the Advanced Research and Global Observation Satellite (ARGOS) data collection system	
Microchip Implant	Microchip technology-based device implanted or affixed to a species subject in order to track or monitor	
PIT Tag	Passive Integrated Transponder (PIT) tag. A permanently-implanted coded marker that serves to reliably identify an individual from a subject species.	
Patagial Tag	A patagial tag is a permanent tag held onto the wing of a bird by a rivet punched through the patagium	
Static Collar	Collar not equipped with electronics. For example, colour-coded collars are used to be able to individually identify animals by sight alone.	
VHF Collar	Allow for manually tracking and recording; Collars that use Very High Frequency (VHF) frequencies to transmit radio signals, requiring the use of VHF frequency radio receivers.	