

Land Information Ontario Data Description

Species Occurrence, Provincially Tracked

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LIO Class Catalogue

Species Occurrence, Provincially Tracked

Class Short Name: SPEOCCPT

Version Number: 4

Class Description:

Each derived occurrence represents a summary of species observations. For example seven pairs of birds nesting in a contiguous woodlot would be mapped as one single occurrence - not seven. A bird occurrence is usually defined as a breeding area or migration staging area, but not as a single sighting by a bird watcher. A plant occurrence is usually any place where the plant occurs naturally in a continuous habitat.

Abstract Class Name: SPMNTUREGION

Abstract Class

Description:

Spatial Multi-Non-Tessellating-Unconstrained Region: An object is represented by ONE or MORE polygons. Polygons MAY overlap WITHOUT any restrictions. HOLES within and GAPS between polygons ARE allowed. Example: Forest "Insect Damage Area". Mapped "Spruce Budworm" defoliated areas may overlap "Forest Tent Caterpillar" damaged areas. Likewise, mapped "Gypsy Moth" tree mortality areas may overlap mapped other "Gypsy Moth" defoliated areas from current and previous years.

Tables in LIO Class:

Species Occurrence, Provincially Tracked

SPECIES_OCC_PROV_TRACKED_FT

An area with suitable habitat where a provincially tracked or invasive species is known to live. The methodology used to derive an occurrence varies by species and is based on international standards developed by NatureServe that enable cross-jurisdictional comparisons of species occurrences. This methodology is coordinated by the Natural Heritage Information Centre (NHIC) of the Ontario Ministry of Natural Resources. ---- Each derived occurrence represents a summary of species observations. For example seven pairs of birds nesting in a contiguous woodlot would be mapped as one single occurrence - not seven. A bird occurrence is usually defined as a breeding area or migration staging area, but not as a single sighting by a bird watcher. A plant occurrence is usually any place where the plant occurs naturally in a continuous habitat.

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.				
LOCATION_ACCURACY	VARCHAR2 (25)	Yes	ACCURACY	Not Applicable, Over 10,000 metres, Within 1 metre, Within 10 metres, Within 10,000 metres, Within 100 metres, ... (See LOCATION_ACCURACY_LIST table)
The degree of conformity or closeness of a measurement within the database to its true value in the world.				
LOCATION_DESCR	VARCHAR2 (2000)	No	LOCATION	
Description of the area or directions on how to get to the site.				
GEOG_UNIT_DESCR	VARCHAR2 (2000)	No	GUT_DESCR	
Detailed description of the Geographic Unit.				
SENSITIVITY_CLASS	VARCHAR2 (15)	Yes	SENS_CLASS	
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 se nsitive 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 l evels. If disclosed will not result in any injury to individuals, government or private sector insti tutions (i.e. base data).				
SENSITIVITY_DATE	DATE	Yes	SENS_DATE	
The date that the sensitivity classification was established.				
SENSITIVITY_RATIONALE	VARCHAR2 (50)	Yes	SENS_RAT	
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 Reqt", "Cultural Heritage Site", "Other". Note: For Species at Risk (SAR) features, please use "Legislative or Legal Reqt" as a rationale.

SENS_RATIONALE_OTHER_DESCR	VARCHAR2 (250)	No	SENS_DESCR	
Description of the reason(s) for the information classification when "Other" is selected as the rationale.				
VERIFICATION_STATUS_FLG	VARCHAR2 (10)	No	VERISTT_FL	
An indication as to whether a qualified employee has verified the existence of the geographic unit.				
VERIFICATION_STATUS_DATE	DATE	No	VERISTT_DT	
Date that the geographic unit was verified/validated.				
BUSINESS_EFF_DATE_FLG	VARCHAR2 (10)	No	BUSEFFDTFL	
Indication of whether the business effective date is an actual or estimated value.				
BUSINESS_EFFECTIVE_DATE	DATE	No	BUS_EFF_DT	
Date that the record becomes effective in relation to the business i.e. the date MNR became aware of its existence.				
BUSINESS_EXPIRY_DATE	DATE	No	BUS_EXP_DT	
A date indicating when the record was determined to be invalid.				
SYSTEM_CALCULATED_AREA	NUMBER (16,3)	No	SYS_AREA	
The area of a polygon measured in square metres by the system.				
SYSTEM_CALCULATED_LENGTH	NUMBER (16,3)	No	SYS_LENGTH	
The perimeter of a polygon or length of a line measured in metres.				
USER_CALCULATED_METRIC	NUMBER (16,3)	No	USER_CALC	
The length, perimeter or area of an object in metres or square metres as measured or provided by the user.				
GENERAL_COMMENTS	VARCHAR2 (2000)	No	GNL_CMT	
GEOMETRY_UPDATE_DATETIME	DATE	No	GEO_UPD_DT	
Date/time the geometry was created or last modified in the source database.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS_DATABASE_REFERENCE

A link to an external database or an internal object in the same database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
INTERNAL_EXTERNAL_FLG	VARCHAR2 (10)	Yes	INT_EXT	Internal, External

A flag indicating if the database being referenced is internal (NRVIS/LIO) or external.

DATABASE_REFERENCE_IDENT	VARCHAR2 (50)	Yes	IDENT
Identifier of a reference that is linked e.g. Land Use Permit Number, LIS Number, the FMF Object ID of a Concrete Class.			
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME
Static short name that will be used by for the concrete class.			
DATABASE_REFERENCE_DETAIL	VARCHAR2 (2000)	No	DETAIL
Details on the rationale, use, dependency, or comments on the database reference. If a dependence on other data class geometry exists, this can be identified in this field.			
RELATED_CLASS_SHORT_NAME	VARCHAR2 (8)	No	CLASS_NAME
The static short name that is used by the related concrete class.			
EXT_REF_TYPE_CODE	VARCHAR2 (8)	No	EXT_TYPE
The type of external database that the identifier pertains to e.g. LUPS, LIS, etc.			
TYPE_OTHER_DESCR	VARCHAR2 (60)	No	OTH_DESCR
A full description of the type when set to "other".			
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
Date/time the record was created or last modified in the source database.			

CLASS JUSTIFICATION

The justification for the addition of or changes to a geographic feature.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
JUSTIFICATION_REASON	VARCHAR2 (2000)	Yes	REASON	
Reason for justification of the existence of a geographic feature.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the data class which this record is part of.				
JUSTIFICATION_DATE	DATE	Yes	JUSTIF_DT	
Date that the geographic feature was justified.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS OTHER INFORMATION

This table allows the NRVIS/LIO users to enter local-needs type of information, currently not captured in the NRVIS or LIO database. The table content will be analysed periodically to determine if the field(s) should be incorporated into the regular data class structure.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
FIELD_NAME	VARCHAR2 (30)	Yes	FIELD_NAME	
The attribute name for the information.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the concrete class which this record is part of.				
FIELD_TYPE	VARCHAR2 (8)	Yes	FIELD_TYPE	String, Integer, Double
The type of field.				
FIELD_VALUE_STRING	VARCHAR2 (50)	No	VALUE_S	
A field used to store character strings.				
FIELD_VALUE_INTEGER	NUMBER (5,0)	No	VALUE_I	
A field used to store integer values (small numbers).				
FIELD_VALUE_DOUBLE	NUMBER (10,3)	No	VALUE_D	
A field used to store decimal data with up to two decimals.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

CLASS_PARTY_ROLE

A link to an external contact database.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
PARTY_IDENT	VARCHAR2 (25)	Yes	PARTY_ID	
An identifier for a party (group or individual). It should reference an identifier in an external database which would contain further information. The identifier should not contain personal information (i.e. Social Insurance Number, Outdoors Card Number, phone number, name etc.).				
PARTY_DATABASE	VARCHAR2 (100)	Yes	PARTY_DB	
The database that contains the party information.				
ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	Affiliated With, Approver, Authority Holder, Claim Holder, Contact, Contractor, ... (See ROLE_TYPE_LIST table)
The role that an organization or an individual plays.				

CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME
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System-generated column denoting the concrete class which this record is part of.

ROLE_DETAIL	VARCHAR2 (200)	No	DETAIL
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Additional details about the role.

START_DATE	DATE	No	START_DATE
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The date when a Party starts to play a Role.

END_DATE	DATE	No	END_DATE
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The date when a Party ceases to play a Role.

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

CLASS_SOURCE

Intersection table between the data class and Source List table.

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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A unique numeric provincial identifier assigned to each object.

SOURCE_NAME	VARCHAR2 (100)	Yes	SOURCE_NAM	AFFM Provincial Administrative Maps, Aerial Photography, Aerial Survey, Book/Publication, CIR Photograpy, City of Ottawa Borehole Database, ... (See SOURCE_LIST table)
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The name of the source.

SOURCE_DETAIL	VARCHAR2 (254)	Yes	SOURCE_DET
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What part of the source pertains to the feature. Examples: Summary data from a data base, pages in a book or atlas, figure number and page from a publication, a section of a map, record in a database.

CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME
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Unique abbreviation of the concrete class name (primary key)

SOURCE_DESCR	VARCHAR2 (2000)	No	SOURCE_DES
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Text providing details about the source.

METHOD_DESCR	VARCHAR2 (2000)	No	METHOD
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The type of method, tools, and techniques used in observing/collecting/recording the Source. It may also include a URL where users could get further information on the method used.

SOURCE_APPLICABILITY	VARCHAR2 (20)	No	APPLICABIL
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How the source contributes to the feature's definition.

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

CLASS_SUPPORTING_MATERIAL

Material (document/file/picture) that provides more information on a geographic feature.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
A unique numeric provincial identifier assigned to each object.				
MATERIAL_NAME	VARCHAR2 (200)	Yes	NAME	
A name or brief description of the material.				
MATERIAL_LOCATION	VARCHAR2 (200)	Yes	LOCATION	
The location where the supporting material is stored. This may be a physical location or a link to a storage location.				
CLASS_SHORT_NAME	VARCHAR2 (8)	Yes	CLASS_NAME	
System-generated column denoting the concrete class which this record is part of.				
URL_ENG	VARCHAR2 (500)	No	URL_ENG	
The address of a computer or a document in English on the Internet that consists of a communications protocol followed by a colon and two slashes (as http://), the identifier of a computer (as www.m-w.com) and usually a path through a directory to a file -- called also universal resource locator.				
URL_FRE	VARCHAR2 (500)	No	URL_FRE	
The address of a computer or a document in French on the Internet that consists of a communications protocol followed by a colon and two slashes (as http://), the identifier of a computer (as www.m-w.com) and usually a path through a directory to a file -- called also universal resource locator.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

EXTERNAL_REF_TYPE_LIST

List of valid EXTERNAL_REFERENCE_TYPE codes.

LOCATION_ACCURACY_LIST

List of valid LOCATION_ACCURACYs.

Column Name	Column Type	Mandatory	Short Name	Valid Values
LOCATION_ACCURACY	VARCHAR2 (25)	Yes	ACCURACY	
The accuracy of the location of the feature at an OBM scale. The degree of conformity or closeness of a measurement to the true value.				
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.				

ROLE_TYPE_LIST

List of valid party role types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE	
The role that an organization or an individual plays.				
ROLE_TYPE_DESCR	VARCHAR2 (2000)	Yes	DESCR	
Description of Role 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.				

SOURCE_LIST

A description of the source information that is the basis for creating or changing information about a geographic feature. It may be an observation, possibly resulting from a field survey or an adhoc report or a reference to a published or unpublished document.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SOURCE_NAME	VARCHAR2 (100)	Yes	NAME	
The name of the source.				
SOURCE_DATE	VARCHAR2 (50)	No	SRC_DATE	
The date of the source.				
SOURCE_ORIGINATOR	VARCHAR2 (75)	No	ORIGINATOR	
The originator or author of the source. Includes the author(s) of a book; the originator(s) of a survey or project, etc.Examples: Smith, J. Smith, J. and Jones, K. Smith, J., Jones, K. and White, T. Anon. (where no author identified) OMNR (where authorship is corporate) Northwest District (lead and delivered the data collection project)				
SOURCE_SCALE	VARCHAR2	No	SCALE	

(15)

The scale of the vector base or aerial photography, the cell resolution of a grid, or the pixel resolution of an image used to record the location of the feature. Examples: For a vector source or aerial photography: 1:10,000 1:20,000 1:250,000. For a grid or imagery source: 1 km, 10 m, 15 seconds.

HORIZONTAL_DATUM	VARCHAR2 (10)	No	H_DATUM
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Identifies the reference system used for defining the coordinates of points. There are three common horizontal datum systems used in Ontario: NAD83, NAD27, NAD27 with 1974 adjustment. The datum models the shape of the earth.

VERTICAL_DATUM	VARCHAR2 (30)	No	V_DATUM
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The zero surface to which elevations or heights are referred is called a vertical datum. Traditionally, surveyors and mapmakers have tried to simplify the task by using the average (or mean) sea level as the definition of zero elevation, because the sea surface is available worldwide. MSL is a close approximation to another surface, defined by gravity, called the geoid, which is the true zero surface for measuring elevations. Example: WGS-84 EGM96 Geoid.

SOURCE_PROJECTION	VARCHAR2 (40)	No	PROJECTION
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The name of a systematic representation of all or part of the surface of the Earth on a plane or developable surface.

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_HABITAT_USE_CLASS_LIST

Listing of permissible species habitat use classes.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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HABITAT_USE_CLASS	VARCHAR2 (75)	Yes	HAB_CLASS
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The life process and subcategory associated with a particular site. ----- Note: The permissible values for this field were defined by the Natural Heritage Information Centre (NHIC) and Species at Risk (SAR).

HABITAT_USE_CLASS_DESCR	VARCHAR2 (254)	Yes	HAB_CLS_D
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Context description of the species Habitat Use Class.

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_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
SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	
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	
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	
The scientific name of the organism which identifies the genus and species. ----- NHIC database field: SCI_NAME				
COM_NAME	VARCHAR2 (75)	No	COM_NAME	
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	
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 (15)	Yes	REC_SENS	Low, Medium, Non-Sensitive
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 (1)	No	NHIC_TRACK	Y, N,P
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 (1)	No	NHIC_SENS	Y, N
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 (15)	SARA_SCHED
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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 (15)	SRANK_CODE
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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 (254)	No	SRANK_REAS
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The reason documented by NHIC for the assigned Subnational Rank. ----- NHIC database field: S_RANK_REASONS

SARO_STATUS	VARCHAR2 (15)	No	SARO_STAT
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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
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The calendar date that is applicable to the current Species At Risk in Ontario (SARO) status.

SARO_STATUS_COMMENTS	VARCHAR2 (254)	No	SARO_COM
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Comments relating to the current Species At Risk in Ontario (SARO) status.

KINGDOM	VARCHAR2 (10)	No	KINGDOM
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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
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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
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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
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In biology, class is a taxonomic rank between superclass and subclass. ----- NHIC database field: CLASS

SUBCLASS	VARCHAR2 (100)	No	SUBCLASS
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In biology, subclass is a taxonomic rank intermediate between class and infraclass.

INFRACCLASS	VARCHAR2 (100)	No	INFRACCLASS
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In biology, infraclass is a taxonomic rank intermediate between subclass and order.

ORDER_TAXON	VARCHAR2 (100)	No	ORDER_TX
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In biology, order is a taxonomic rank between infraclass and suborder. ----- NHIC database field: ORDER

SUBORDER	VARCHAR2 (100)	No	SUBORDER
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In biology, suborder is a taxonomic rank intermediate between order and infraorder.

INFRAORDER	VARCHAR2 (100)	No	INFRAORDER
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In biology, infraorder a taxonomic rank intermediate between suborder and superfamily.

SUPERFAMILY	VARCHAR2 (100)	No	SUPERFAMIL
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In biology, superfamily is a taxonomic rank intermediate between infraorder and family.

FAMILY_ID	NUMBER (13,0)	No	FAMILY_ID
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The NatureServe Identifier assigned a each species nomenclature Family. ----- NHIC database field: FAM_ID

FAMILY	VARCHAR2 (100)	No	FAMILY
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In biology, family is a taxonomic rank between superfamily and subfamily. ----- NHIC database field: FAMILY

FAMILY_NAME	VARCHAR2 (20)	No	FAMILY_NAM
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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 (100)	No	SUBFAMILY
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In biology, subfamily is a taxonomic rank intermediate between family and tribe.

TRIBE	VARCHAR2 (100)	No	TRIBE
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In biology, tribe is a taxonomic rank intermediate between subfamily and genus.

GENUS_ID	NUMBER (13,0)	No	GENUS_ID
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The NatureServe Identifier assigned a each species nomenclature Genus. ----- NHIC database field: GENUS_ID

GENUS	VARCHAR2	No	GENUS
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(100)

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

GENUS_NAME	VARCHAR2 No (100)	GENUS_NAME
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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 (100)	SUBGENUS
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In biology, subgenus is a taxonomic rank intermediate between genus and species.

SPECIES	VARCHAR2 No (100)	SPECIES
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In biology, a species is a taxonomic rank between subgenus and subspecies.

SUBSPECIES	VARCHAR2 No (100)	SUBSPECIES
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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_OCCURRENCE

Details about a Species Occurrence.

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 identifier, unique at the application level.

CLASS_SHORT_NAME	VARCHAR2 (11)	Yes	CLASS_NAME
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The unique LIO database short name assigned to every Data Class. For example: SPEOCC = Species Occurrence
SPEOCCPE = Species Occurrence Pending

SPC_REC_CREATOR_GROUP	VARCHAR2 (100)	Yes	CREATOR_GR	Yes, No
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Identifies the group responsible for creating the species occurrence pending record using the Corporate Editor. -----
Field Purpose: Permits the filtering of occurrence data by their record creator origin. For example, finding records created by Parks Ontario, NHIC, Caribou Program, Guelph District etc.

SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	0, 1000, 10000, 100000, 100002, 100004, ... (See SPECIES_MASTER_LIST table)
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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. ----- Note: For Species Occurrence Provincial, the following filter will be used in the Species Master List: WHERE TRACKED = Y AND PEST = Y ----- NHIC database: ELEMENT_SUBNATIONAL_ID

EO_ID	NUMBER (10,0)	Yes	EO_ID
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A unique identifier assigned to each provincially tracked species occurrence.

OCCURRENCE_RANK	VARCHAR2 No (65)	OCCUR_RANK	A - Excellent estimated viability, A? - Possibly excellent estimated viability,
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AB - Excellent or good estimated viability, AC - Excellent, good, or fair estimated viability, B - Good estimated viability, B? - Possibly good estimated viability, BC - Good or fair estimated viability, BD - Good, fair, or poor estimated viability, C - Fair estimated viability, C? - Possibly fair estimated viability, CD - Fair or poor estimated viability, D - Poor estimated viability, D? - Possibly poor estimated viability, E - Verified extant (viability not assessed), F - Failed to find, H - Historical, X - Extirpated, F? - Possibly failed to find, H? - Possibly historical, X? - Possibly extirpated, U - Unrankable, NR - Not ranked

An assigned ranking that describes the quality of the area in relation to other occurrences for the same species. -----
 Note: This field will store both the Occurrence Rank code and its full value. --- For more information about Occurrence Rankings, please refer to the NRVIS Users Guide.

OCCURRENCE_RANKING_DATE	DATE	No	RANK_DATE	
The date on which the Occurrence Rank was applied.				
OCCURRENCE_RANKING_COMMENT	VARCHAR2 (2000)	No	RANK_COMM	
Comment further explaining the rank as applied to an occurrence.				
FIRST_OBSERVATION_DATE	VARCHAR2 (20)	No	FIRST_OBS	
The date when a species was first observed. Where multiple species observations are used to derive an occurrence, the value of the earliest observation date in the group should be used. ----- Refer to user guide for recommended best practices regarding the date format for values stored in this field.				
LAST_OBSERVATION_DATE	VARCHAR2 (20)	No	LAST_OBS	
The date when a species was last observed. Where multiple species observations are used to derive an occurrence, the value of the most recent observation date in the group should be used. ----- Refer to user guide for recommended best practices regarding the date format for values stored in this field.				
LOCATION_NAME	VARCHAR2 (100)	No	LOCATION	
A generally accepted name for the location where the feature occurs.				
DIRECTIONS	VARCHAR2 (2000)	No	DIRECTIONS	
Instructions on how to get to the site including the method (canoe, helicopter etc.), time of year and site accessibility.				
RA_VALUE	VARCHAR2 (20)	No	RA_VALUE	Very High, High, Medium, Low, Very Low, Unknown
Representation Accuracy (RA) varies on the basis of area observed to be occupied by the species relative to the area contained within the footprint of the mapped observation. Differences in these two values result from incorporation of additional area within the observation boundary to incorporate associated locational uncertainty. Please refer to user-guide for details. ----- Note: a (null) value in this field indicates that the RA was not assessed.				
RA_COMMENT	VARCHAR2 (1000)	No	RA_COMMENT	
Comments related to the value entered in the Representation Accuracy Value.				
BIOLOGICAL_DETAILS_NOTES	VARCHAR2 (2000)	No	BIOL_DET	
Data collected on the biology of this Occurrence, including the number of individuals, vigor, habitat, soils, associated				

species, peculiar characteristics, etc. ----- NHIC database field name: EO_DATA

HABITAT_USE_CLASS	VARCHAR2 No (75)	HAB_CLASS	Caribou Winter Activity Area, Dispersal - Dispersal Site, Dispersal - Travel Corridor, Diurnal Movement - Roosting Site, Feeding - Burrowing Site, Feeding - Caching Site, ... (See SPECIES_HABITAT_USE_CLASS_LIST table)
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The life process and subcategory associated with a particular site. ----- Note: The permissible values for this field were defined by the Natural Heritage Information Centre (NHIC) and Species at Risk (SAR). ----- Rule: When a value of "Other" is chosen, it should be described in the "Habitat Description" field.

HABITAT_DESCR	VARCHAR2 No (2000)	HAB_DESCR
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Freeform text about the surrounding habitat.

HABITAT_BEST_BEFORE_DATE	VARCHAR2 No (8)	HAB_BEST_B
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The date past which the area may no longer contain valid habitat. The default value should be five years ahead of the record effective date for the feature. ----- The format is as follows: YYYYMMDD (Year-Month-Day) e.g. 19631031

MANAGEMENT_COMMENTS	VARCHAR2 No (2000)	MGMT_COMM
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Comments about the management of the feature at this location.

PROTECTION_COMMENTS	VARCHAR2 No (2000)	PROT_COMM
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Comments about the level of protection provided or required for the site.

SEPARATION_COMMENTS	VARCHAR2 No (1000)	SEP_COMM
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Comments about the separation of this species occurrence from other nearby species occurrences.

DATA_RESTRICT_IND	VARCHAR2 No (3)	RESTR_IND	Yes, No
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A Yes/No indicator where additional data protection is required for the feature e.g. omit spatial and attribute data from public viewing. Users should elaborate the reason why the data should be protected in the Data Restriction Rationale field. ----- Default = No

DATA_RESTRICT_RATIONALE	VARCHAR2 No (254)	RESTR_RAT
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The rationale explaining why there is a restriction on the observation data e.g. a snake hibernaculum near a public path. Data Restrictions are judged on a case-by-case basis and MNR District recommendations. ----- This field should be used to indicate any other information which may be relevant to the sensitivity of the species, e.g. Global conservation status rank, Provincial conservation responsibility, rarity and distribution in the province. ----- This field provides an explanation where spatial observation data should have additional protection when displayed. ----- CAVEAT: Users MUST still flag features with the appropriate Sensitivity Class to ensure proper data protection in the Ontario data warehouse (Low, Medium or Non-Sensitive)

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

SPECIES_OCCUR_AND_OBS_DETAIL

Intersect table between Species Occurrence Detail and Species Observation Detail table. A species occurrence is defined from one or more species observations. ----- Rule: The association between a Species Occurrence feature and a Species Observation can only be accomplished for NHIC evaluated Observation Records that have an assigned NHIC Observation Identifier. ----- Associations are to be made through one of the Species Occurrence data classes.

Column Name	Column	Mandatory	Short Name	Valid Values
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Type			
SPECIES_OBS_DETAIL_ID	NUMBER (13,0)	Yes	OBS_DET_ID
Foreign key to parent SPECIES OBSERVATION DETAIL table record where the NHIC Observation Identifier has a value (i.e. it has been evaluated by NHIC and deemed to be part of an occurrence). ----- An identifier populated by NHIC for each observation e.g. AY123.			
SPECIES_OCCURRENCE_ID	NUMBER (13,0)	Yes	OCCUR_ID
The Object ID of the Species Occurrence Detail record that the Species Observation Detail record is associated to. --- System-generated object identifier, unique at the application level.			
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE
Date/time the record was created or last modified in the source database.			

SPECIES_REC_CREATOR_GROUP_LIST

Master listing of Ontario Ministry of Natural Resources (OMNR) business areas responsible for creating the species record using the Corporate Editing Tool.

Column Name	Column Type	Mandatory	Short Name	Valid Values
SPC_REC_CREATOR_GROUP	VARCHAR2 (100)	Yes	CREATOR_GR	
Identifies the group responsible for creating the species record using the Corporate Editor. ----- Field Purpose: Permits the filtering of species data by their record creator origin. For example, finding records created by Parks Ontario, NHIC, Caribou Program, Guelph District etc.				
SPC_REC_CREATOR_GROUP_DESCR	VARCHAR2 (254)	Yes	DESCR	
A brief description about the Group.				
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.				

LIO Lookup Table Values:

EXTERNAL_REF_TYPE_LIST

EXT REF TYPE CODE	EXT REF TYPE DESCR	EXPIRY DATETIME
ALPS	Aggregate Licence Permit Database	
AMIS	Abandoned Mines Database	
ARFIS	Algonquin Region Forest Database	
BCD	Biological and Conservation Database	
DTDB	Digital Topographic Database	
FISHARC	Fisheries Data Archive	
FISHLIB	Fisheries Information Library	
FRI	Forest Resources Inventory Database	
IF	Internal Filing	
LIS	Land Index System	
LUP	Land Use Permit	
NADB	Natural Areas Database	
NTDB	National Topographic Database	
NWEIMS	Wetland Evaluation Information Management Database (North)	
OBM	Ontario Base Map Database	
OFIS	Ontario Fisheries Information Database	
OLI	Ontario Land Inventory	
OPDS	Ontario Petroleum Database	
OTHER	Other External Reference	
PER	Permit	
RBT	Resource Based Tourism Licence	
SFMM	Sustainable Forest Management Model	
WEIMS	Wetland Evaluation Information Management Database (South)	
^	NRVIS 2.0 Data Conversion	1999-11-05

LIO Lookup Table Values:

LOCATION_ACCURACY_LIST

LOCATION ACCURACY	EXPIRY DATETIME
Not Applicable	
Over 10,000 metres	
Within 1 metre	
Within 10 metres	
Within 10,000 metres	
Within 100 metres	
Within 1000 metres	
Within 2 metres	
Within 20 metres	
Within 200 metres	
Within 2000 metres	
Within 5 metres	
Within 50 metres	
Within 500 metres	
Within 5000 metres	
AC Accurate (to 10m)	2007-01-12
AP Approximate (to 500m)	2007-01-12
GE General (to 10,000m)	2007-01-12
MO Moderate (to 1000m)	2007-01-12
RE Reliable (to 100m)	2007-01-12
VA Very Accurate (to 2m)	2007-01-12
VG Vague (to 100,000m)	2007-01-12
^ Data Load	2007-01-12

LIO Lookup Table Values:

ROLE_TYPE_LIST

ROLE TYPE	ROLE TYPE DESCR	EXPIRY DATETIME
Affiliated With	This role type indicates that the related "from" Party (Individual or Group) has a relationship with the related "to" Party that is not more explicitly covered by another role type.	
Approver	This role type indicates that the related Party (Individual or Group) is one that has approved action associated with the related item. For example, if the related item is an Authority (License, permit, etc.) this would indicate the Party that approved the issuance of the Authority; if the related item is a Recommended Action this would indicate the Party that approved the initiation of the action; etc.	
Authority Holder	This role type indicates that the related Party (Individual or Group) is the one to which the Ministry has issued the related Authority (license, permit, etc.).	
Claim Holder	This role type indicates that the related Party (Individual or Group) is the one that is the registered owner of the related Mining Claim (area).	
Contact	This role type indicates that the related "from" Party (Individual or Group) is the designated point of contact for communication with the related "to" Party.	
Contractor	N/A	
Custodian	This role type indicates that the related Party (Individual or Group) is responsible for the care of the related Geographic Unit.	
Data Provider	This role type indicates that the related Party (Individual or Group) is the provider of a data source about the related Geographic Unit.	
Employee	This role type indicates that the related "from" Party (an Individual) is employed by the related "to" Party (a Group).	
Evaluator	This role type indicates that the related Party (Individual or Group) is the one who has evaluated the related Geographic Unit.	
Group Member	This role type indicates that the related "from" Party (Individual or Group) is a member of the related "to" Party (a Group). This could include membership in a Local Citizens Committee or a designated interest group.	
Information Holding Custodian	This role type indicates that the related Party (Individual or Group) is responsible for the storage and protection of the related Information Holding.	
Interested Party	This role type indicates that the related Party (Individual or Group) has a stated interest in a related Issue; or has a stated interest in plans and activities involving the related Geographic Unit.	
Issuer	This role type indicates that the related Party (Individual or Group)	

	is one that has issued the related Authority (license, permit, etc.).	
Lease Holder	This role type indicates that the related Party (Individual or Group) has occupancy rights to the related Geographic Unit for the period and according to the terms of a lease agreement.	
Manager	This role type indicates that the related "from" Party (Individual or Group) manages or directs the activities of the related "to" Party (the "to" Party reports to or is accountable to the "from" Party); or manages the operation of the related Geographic Unit (e.g., a Tourism Establishment).	
Metadata Custodian	This role type indicates that the related Party (Individual or Group) is responsible for the storage and protection of the information ABOUT the related Information Holding. Note: There is a separate role type for the custodian of the information holding itself.	
Observer	This role type indicates that the related Party (Individual or Group) is the one who made the observations in the related Information Source.	
Operator	This role type indicates that the related Party (Individual or Group) operates the related Geographic Unit facility (e.g., Tourism Establishment, Mill).	
Owner	This role type indicates that the related Party (Individual or Group) owns the related Geographic Unit (e.g., Tourism Establishment).	
Partner	This role type indicates that the related "from" Party (Individual or Group) has a partnership arrangement with the related "to" Party.	
Steward	This role type indicates that the related "from" Party (Individual or Group) is responsible for assisting the Ministry with respect to the management of resources within the related Geographic Unit.	
Supervisor	This role type indicates that the related "from" Party (Individual or Group) supervises the activities of the related "to" Party.	
Verifier	N/A	

LIO Lookup Table Values:

SOURCE_LIST

SOURCE NAME	SOURCE DATE	SOURCE ORIGINATOR	SOURCE SCALE	HORIZONTAL DATUM	VERTICAL DATUM	SOURCE PROJECTION	EXPIRY DATETIME
AFFM Provincial Administrative Maps		Ministry of Natural Resources	600000				
Aerial Photography		Ministry of Natural Resources	15840				
Aerial Survey							
Book/Publication							
CIR Photograpy		Ministry of Natural Resources					
City of Ottawa Borehole Database	1883 - 2006	City of Ottawa	Varies		Mean Average Sea Level	Geodetic and UTM	
Digital File							
Digital Map							
Field Survey\Site Visit							
File System/Filing Cabinet Information							
Forest Resources Inventory		Ministry of Natural Resources		NAD27		UTM	
GPS Data Collection							
Hard Copy/Paper Map							
IKONOS Multispectral		Ministry of Natural Resources					
IKONOS Panchromatic		Ministry of Natural Resources					
IRS Multispectral		Ministry of Natural Resources					
IRS Panchromatic		Ministry of Natural Resources					
IRS Pansharpened		Ministry of Natural Resources					

Landsat-1,2,3 MSS		Ministry of Natural Resources					
Landsat-4,5 MSS		Ministry of Natural Resources					
Landsat-7 ETM		Ministry of Natural Resources					
Local Borehole Drilling Program Results	2006	Ministry of Northern Development and Mines			Mean Average Sea Level		
Local Knowledge							
MNDM Assesment File							
MNDM Client/Company Information							
MNR Based Observation							
MTO Engineering Reports	Varies	Ministry of Transportation	Varies		Mean Average Sea Level		
NRCan - CanVec	2008	Natural Resources Canada	50000	NAD83			
NRCan - National Hydro Network	2008	Natural Resources Canada	50000	NAD83			
NTS Map 1:250000	1970 to 2003	Department of Natural Reosurces	250000	NAD27			
NTS Map 1:50000	1970 to 2003	Department of Natural Resources	50000	NAD27			
Ontario Base Map 1:10000	1978 to 1995	Ministry of Natural Resources	10000	NAD27		UTM	
Ontario Base Map 1:20000	1978 to 1995	Ministry of Natural Resources	20000	NAD27		UTM	
Ontario Geological Survey Fieldwork Mapping	Varies to 2004	Ontario Geological Survey	1:50,000	NAD83	Mean Average Sea Level	Universal Transvers Mercator	
Ontario Parcel				NAD83			
OrthoImagery		Ministry of Natural Resources					
Public Observation							

Quaternary Geology Study	Varies	Ministry of Northern Development and Mines			Mean Average Sea Level		
Unknown	11-12-02						
Urban Geology Automated Information System (UGAIS)	1956-1972	Geological Survey of Canada	Varies	NAD27	Mean Average Sea Level	Universal Transverse Mercator	
Water Well Data Improvement Project	2006	Ministry of Natural Resources, Water Resources Information Program	Varies	NAD83	Mean Average Sea Level	Geodetic	
Water Well Information System (WWIS)	1899 - 2003	Ministry of the Environment, Environmental Monitoring and Reporting Branch	Varies	NAD27	Mean Average Sea Level	Universal Transverse Mercator	
Waterloo Area Geology Automated Information System (WAGAIS)	1900 - 1977	Geological Survey of Canada	Varies	NAD27	Mean Average Sea Level	Universal Transverse Mercator	
External Source from NRVIS 2							2007-01-12
Internal Source from NRVIS 2							2007-01-12
Material Source from NRVIS 2							2007-01-12
Ontario Base Map	1978 to 1995	Ministry of Natural Resources		NAD27		UTM	2007-01-12
Source Observation from NRVIS 2							2007-01-12
Unknown Imagery							2007-01-12

LIO Lookup Table Values:

SPECIES_HABITAT_USE_CLASS_LIST

HABITAT USE CLASS	HABITAT USE CLASS DESCR	EXPIRY DATETIME
Caribou Winter Activity Area	Exception. To be provided by Caribou Program	
Dispersal - Dispersal Site	To be provided by NHIC	
Dispersal - Travel Corridor	To be provided by NHIC	
Diurnal Movement - Roosting Site	To be provided by NHIC	
Feeding - Burrowing Site	To be provided by NHIC	
Feeding - Caching Site	To be provided by NHIC	
Feeding - Feeding Site	To be provided by NHIC	
Feeding - Plucking Site	To be provided by NHIC	
Hibernation - Denning Site	To be provided by NHIC	
Hibernation - Hibernaculum	To be provided by NHIC	
Migration - Staging Site	To be provided by NHIC	
Other	To be provided by NHIC	
Over-wintering - Denning Site	To be provided by NHIC	
Over-wintering - Overwintering Site	To be provided by NHIC	
Rearing - Rearing Site	To be provided by NHIC	
Reproduction - Calving Site	To be provided by NHIC	
Reproduction - Denning Site	To be provided by NHIC	
Reproduction - Gestation Site	To be provided by NHIC	
Reproduction - Nesting Site	To be provided by NHIC	
Reproduction - Reproduction Site	To be provided by NHIC	
Reproduction - Spawning Site	To be provided by NHIC	
Resting - Basking Site	To be provided by NHIC	
Resting - Denning Site	To be provided by NHIC	
Resting - Perching Site	To be provided by NHIC	
Resting - Resting Site	To be provided by NHIC	
Resting - Shedding Site	To be provided by NHIC	
Undetermined	To be provided by NHIC	

LIO Lookup Table Values:

SPECIES_REC_CREATOR_GROUP_LIST

SPC REC CREATOR GROUP	SPC REC CREATOR GROUP DESCR	EXPIRY DATETIME
Caribou Program	NRVIS edits done by Caribou Program staff	
Invasive Species Program	NRVIS edits done by MNR Invasive Species staff.	
MNR - OTHER	NRVIS edits done by MNR business area not in current list. Describe the business area in the Observation Notes.	
MNR District - Algonquin Park	NRVIS edits done by named MNR District	
MNR District - Aurora	NRVIS edits done by named MNR District	
MNR District - Aylmer	NRVIS edits done by named MNR District	
MNR District - Bancroft	NRVIS edits done by named MNR District	
MNR District - Chapleau	NRVIS edits done by named MNR District	
MNR District - Cochrane	NRVIS edits done by named MNR District	
MNR District - Dryden	NRVIS edits done by named MNR District	
MNR District - Fort Frances	NRVIS edits done by named MNR District	
MNR District - Guelph	NRVIS edits done by named MNR District	
MNR District - Hearst	NRVIS edits done by named MNR District	
MNR District - Kemptville	NRVIS edits done by named MNR District	
MNR District - Kenora	NRVIS edits done by named MNR District	
MNR District - Kirkland Lake	NRVIS edits done by named MNR District	
MNR District - Midhurst	NRVIS edits done by named MNR District	
MNR District - Nipigon	NRVIS edits done by named MNR District	

MNR District - North Bay	NRVIS edits done by named MNR District	
MNR District - Parry Sound	NRVIS edits done by named MNR District	
MNR District - Pembroke	NRVIS edits done by named MNR District	
MNR District - Peterborough	NRVIS edits done by named MNR District	
MNR District - Red Lake	NRVIS edits done by named MNR District	
MNR District - Sault Ste. Marie	NRVIS edits done by named MNR District	
MNR District - Sudbury	NRVIS edits done by named MNR District	
MNR District - Thunder Bay	NRVIS edits done by named MNR District	
MNR District - Wawa	NRVIS edits done by named MNR District	
MNR Northeast Region	NRVIS edits done by MNR Northeast Region staff	
MNR Northwest Region	NRVIS edits done by MNR Northwest Region staff	
MNR Southern Region	NRVIS edits done by MNR Southern Region staff	
NHIC	NRVIS edits done by Natural Heritage Information Centre staff	
Ontario Parks	NRVIS edits done by Ontario Parks staff	
Wolverine Program	NRVIS edits done by Wolverine Program staff	