

Land Information Ontario Data Description

Species Search Area

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LIO Class Catalogue

Species Search Area

Class Short Name: SPSEARCH

Version Number: 1

Class Description:

Identifies the geographic area in which a search for one or more species was conducted through data collection and surveys. The boundaries of a Search Area may be identical to a plot, a protected area, an ecoregion, flight transect or some other defined type of location. The geometry for a Species Search Area is typically not reused. If a search is done in the same area at a later date, a new polygon will need to be created.

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 Search Area

SPECIES_SEARCH_AREA_FT

Identifies the geographic area in which a search for one or more species was conducted through data collection and surveys. The boundaries of a Search Area may be identical to a plot, a protected area, an ecoregion, flight transect or some other defined type of location. The geometry for a Species Search Area is typically not reused. If a search is done in the same area at a later date, a new polygon will need to be created.

Column Name	Column Type	Mandatory	Short Name	Valid Values
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
System-generated object identifier, unique at the application level.				
SPECIES_PROJECT_ID	NUMBER (13,0)	No	PROJECT_ID	
Foreign Key to parent Species Project table record. ----- System generated identifier, unique at the application level.				
SEARCH_AREA_NAME	VARCHAR2 (100)	Yes	AREA_NAME	
The name that the search area is referred to by the business area. The name may be contemporary or historical e.g. an old Patricia Trapline Area from the 1960s, a predefined flight transect identifier etc.				
DATA_COLLECTION_TYPE	VARCHAR2 (50)	Yes	COLL_TYPE	Aerial Survey (FW), Aerial Survey (RW), Calving Survey, Casual Observation OMNR, Casual Observation Public, Collaring (Telemetry), ... (See SPECIES_DATA_COLL_TYPE_LIST table)
Identifies the type of species data collection that was carried out by a business area. Data collection efforts may be program area specific e.g. Caribou Calving Survey, Wolverine Live-Trapping, Historical Record Search.				
TARGET_SPECIES_FLG	VARCHAR2 (8)	Yes	TARGET_FLG	General, Specific
A flag used to indicate the level of detail associated with a target species of interest. ----- RULE: When the flag is set to... Specific: The target species is known and the user must create a new record in the SEARCH TARGET SPECIES child table for one or more species chosen from the Species Master List. --- General: The target species is not specific and is general e.g. songbirds. The user must describe the general level of species being targeted in the General Target Species Name field. NO record(s) are created in the SEARCH TARGET SPECIES child table.				
GENERAL_TARGET_SPECIES_NAME	VARCHAR2 (50)	No	TARGET	
Used to identify a general level of targeted species when one or more specific species is not pre-determined. For example, Game Fish (for a fish survey), Songbirds (for a bird survey). ----- Note: This field is only populated when the Target Species Flag is set to "General".				
SEARCH_AREA_DESCR	VARCHAR2 (254)	No	AREA_DESCR	
A general description of the Search Area such as habitat, geology, land use etc.				
SEARCH_DATE_FLG	VARCHAR2 (15)	Yes	DATE_FLG	Actual, Approximate, Not Available
A flag indicating if the start and/or end date is Actual or Approximate. Approximate is used where date information is incomplete (e.g. historical records).				

SEARCH_START_DATE	VARCHAR2 Yes (20)	START_DATE
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The date that the search activity began for a species. In most cases the search concludes the same day in which case the Search End Date will be the same. ----- Refer to user guide for recommended best practices regarding the date format for values stored in this field.

SEARCH_END_DATE	VARCHAR2 No (20)	END_DATE
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The date that the search activity concluded for the species. ----- Refer to user guide for recommended best practices regarding the date format for values stored in this field.

SEARCH_DATE_COMMENTS	VARCHAR2 No (254)	DATE_COMM
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Comments about the survey start and end dates provided.

AIRCRAFT_PILOT	VARCHAR2 No (100)	PILOT
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Only to be completed for Aerial Survey types: The name of the person who piloted the aircraft while the data was collected. ----- 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. ----- In order to be Freedom of Information and Protection of Privacy Protection Act (FIPPA) compliant, only identify staff working in a professional capacity with or for the Ontario Ministry of Natural Resources (OMNR). Students conducting research in an unofficial capacity as part of a class project should NOT be identified in this field.

AIRCRAFT_NAVIGATOR	VARCHAR2 No (100)	NAVIGATOR
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Only to be completed for Aerial Survey types: The name of the person who acted as the navigator during aerial data collection. ----- 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. ----- In order to be Freedom of Information and Protection of Privacy Protection Act (FIPPA) compliant, only identify staff working in a professional capacity with or for the Ontario Ministry of Natural Resources (OMNR). Students conducting research in an unofficial capacity as part of a class project should NOT be identified in this field.

OBSERVER_LEFT	VARCHAR2 No (100)	OBSERVER_L
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Only to be completed for Aerial Survey types: The name of the person sitting at the rear-left seat of the aircraft during data collection. ----- 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. ----- In order to be Freedom of Information and Protection of Privacy Protection Act (FIPPA) compliant, only identify staff working in a professional capacity with or for the Ontario Ministry of Natural Resources (OMNR). Students conducting research in an unofficial capacity as part of a class project should NOT be identified in this field.

OBSERVER_RIGHT	VARCHAR2 No (100)	OBSERVER_R
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Only to be completed for Aerial Survey types: The name of the person sitting at the rear-right seat of the aircraft during data collection. ----- 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. ----- In order to be Freedom of Information and Protection of Privacy Protection Act (FIPPA) compliant, only identify staff working in a professional capacity with or for the Ontario Ministry of Natural Resources (OMNR). Students conducting research in an unofficial capacity as part of a class project should NOT be identified in this field.

ON_PLOT_START_TIME	VARCHAR2 No (8)	START_TIME
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The documented time that the surveyors began surveying a specific plot. The value is stored using the Long Time format: hh:mm:ss (24-hour clock). For example: 17:20:23.

OFF_PLOT_END_TIME	VARCHAR2 No (8)	END_TIME
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The documented time that the surveyors finished surveying a specific plot. The value is stored using the Long Time format: hh:mm:ss (24-hour clock). For example: 17:20:23.

METEOROLOGICAL_CONDITIONS	VARCHAR2 No (2000)	CONDITIONS
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Free form text describing weather conditions observed before and during the survey. This may include, but is not limited to, air temperature, wind conditions, snow depths, time since the last snowfall, cloud conditions, precipitation, etc.

SURVEY_MANAGER_NAME	VARCHAR2 (100)	No	MANAGER	
The full name of the person (or business area) who is the survey manager or lead. ----- 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?. ----- In order to be Freedom of Information and Protection of Privacy Protection Act (FIPPA) compliant, only identify staff working in a professional capacity with or for the Ontario Ministry of Natural Resources (OMNR). Students conducting research in an unofficial capacity as part of a class project should NOT be identified in this field.				
SEARCH_METHODODOLOGY_AND_EFFORT	VARCHAR2 (254)	No	METHODOL	
A short description of how the search was done and the level of effort involved that was required for the species search. Specific standards used can be associated in the Document Reference table.				
SEARCH_COMMENTS	VARCHAR2 (2000)	No	COMMENTS	
General comments made by the business area about the survey.				
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.				
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.				
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	No	USER_CALC	

(16,3)

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
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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.

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
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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.

INTERNAL_EXTERNAL_FLG	VARCHAR2 (10)	Yes	INT_EXT	Internal, External
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A flag indicating if the database being referenced is internal (NRVIS/LIO) or external.

DATABASE_REFERENCE_IDENT	VARCHAR2 (50)	Yes	IDENT	
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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	
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Static short name that will be used by for the concrete class.

DATABASE_REFERENCE_DETAIL	VARCHAR2 (2000)	No	DETAIL	
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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	
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The static short name that is used by the related concrete class.

EXT_REF_TYPE_CODE	VARCHAR2 (8)	No	EXT_TYPE	
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The type of external database that the identifier pertains to e.g. LUPS, LIS, etc.

TYPE_OTHER_DESCR	VARCHAR2 (60)	No	OTH_DESCR	
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A full description of the type when set to "other".

EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
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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	
System-generated column denoting the concrete class which this record is part of.				
ROLE_DETAIL	VARCHAR2 (200)	No	DETAIL	
Additional details about the role.				
START_DATE	DATE	No	START_DATE	
The date when a Party starts to play a Role.				
END_DATE	DATE	No	END_DATE	
The date when a Party ceases to play a Role.				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
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
OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
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)

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
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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.

MATERIAL_NAME	VARCHAR2 (200)	Yes	NAME	
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A name or brief description of the material.

MATERIAL_LOCATION	VARCHAR2 (200)	Yes	LOCATION	
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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	
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System-generated column denoting the concrete class which this record is part of.

URL_ENG	VARCHAR2 (500)	No	URL_ENG	
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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
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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
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Date/time the record was created or last modified in the source database.

EXTERNAL_REF_TYPE_LIST

List of valid EXTERNAL_REFERENCE_TYPE codes.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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EXT_REF_TYPE_CODE	VARCHAR2 (8)	Yes	EXT_REF_TY
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The type of external database that the identifier pertains to e.g. LUPS, LIS, Other.

EXT_REF_TYPE_DESCR	VARCHAR2 (60)	Yes	EXT_REF_TY
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Description of the type of external reference.

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.

LOCATION_ACCURACY_LIST

List of valid LOCATION_ACCURACYs.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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LOCATION_ACCURACY	VARCHAR2 (25)	Yes	ACCURACY
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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
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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.

ROLE_TYPE_LIST

List of valid party role types.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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ROLE_TYPE	VARCHAR2 (50)	Yes	ROLE_TYPE
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The role that an organization or an individual plays.

ROLE_TYPE_DESCR	VARCHAR2 (2000)	Yes	DESCR
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Description of Role Type.

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.

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 ad hoc report or a reference to a published or unpublished document.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SOURCE_NAME	VARCHAR2 (100)	Yes	NAME	
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The name of the source.

SOURCE_DATE	VARCHAR2 (50)	No	SRC_DATE	
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The date of the source.

SOURCE_ORIGINATOR	VARCHAR2 (75)	No	ORIGINATOR	
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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 (15)	No	SCALE	
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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_DATA_COLL_TYPE_LIST

Lookup table of general data collection types e.g. Calving Survey, Live-Trapping, Historical Record Search, or general e.g. Casual Observations.

Column Name	Column Type	Mandatory	Short Name	Valid Values
DATA_COLLECTION_TYPE	VARCHAR2 (50)	Yes	COLL_TYPE	
Identifies the type of species data collection that was carried out by a business area. Data collection efforts may be program area specific e.g. Caribou Calving Survey, Wolverine Live-Trapping, Historical Record Search.				
DATA_COLLECTION_TYPE_DESCR	VARCHAR2 (254)	Yes	TYPE_DESCR	
Description of the data collection 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_DOCUMENT_REFERENCE

Non-spatial Editable Table: Stores details about a document referenced by a feature e.g. Title, Author, Publication Year, Location etc. This can include standards, procedures, protocols, maps etc.

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.				
DOCUMENT_TYPE	VARCHAR2 (25)	Yes	DOC_TYPE	Miscellaneous, Project Management, Report, Standards and Methods, Protocol, Map-OBM, Map-NTS, Map-Other, Photograph, Project Portfolio, Audio, Data Collection Form, Field Notes, Video
Identifies the document type that is being referenced such as a report, standards and methods, protocols and miscellaneous documentation such as maps. ----- Note: Choose "Project Portfolio" where several document types are bundled together for a project.				
TITLE	VARCHAR2 (254)	Yes	TITLE	
The title of the document or publication. It can be abbreviated if the original title is very long. Example for MRD001: Black River Matheson (BRIM) Data, 1989. ----- For maps, the tile or map reference identifier can be documented in this field e.g. "NTS KIRKLAND LAKE 42 A/1"				
AUTHOR	VARCHAR2 (80)	No	AUTHOR	
The name of the organization or individual who authored the document or publication.				
PUBLICATION_YEAR	NUMBER	No	PUB_YEAR	

(4,0)

The year when the reference was published or otherwise released. Example: 1992

PUBLISHING_INFORMATION	VARCHAR2 (150)	No	PUB_INFO
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The name of the journal, publisher, technical report series and page numbers if applicable.

MAP_SCALE	VARCHAR2 (15)	No	MAP_SCALE
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Where applicable, the scale of the reference map e.g. 1:50,000.

DOCUMENT_LOCATION	VARCHAR2 (254)	No	DOC_LOC
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Identifies the physical location of the referenced document. If the document is digital and is available online, the url to the document or its location can be stored in this field.

PACKAGED_PRODUCT_IND	VARCHAR2 (3)	No	PACK_PROD Yes, No
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A Yes/No indicator whether the document is stored and available in the Land Information Ontario Warehouse as a packaged product.

GENERAL_COMMENTS	VARCHAR2 (2000)	No	GNL_CMT
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General comments about the reference document.

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 No (40)	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
The date that the COSEWIC Status is effective. ----- NHIC database field: COSEWIC_DATE			
COSEWIC_COMMENTS	VARCHAR2 (254)	No	COSEWIC_CO
Comments about the currently assigned COSEWIC Status. ----- NHIC database field: COSEWIC_COM			
SARA_SCHEDULE_STATUS	VARCHAR2 (15)	No	SARA_SCHED
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
The date that the Federal Species at Risk Act (SARA) Status is effective. ----- NHIC database field: SARA_STATUS_DATE			
SUBNATIONAL_RANK_CODE	VARCHAR2 (15)	No	SRANK_CODE
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
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

The date that the Subnational Rank was reviewed by NHIC. ----- NHIC database field:
S_RANK_REVIEW_DATE

SUBNATIONAL_RANK_REASON	VARCHAR2 No (254)	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 No (15)	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 No (254)	SARO_COM
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Comments relating to the current Species At Risk in Ontario (SARO) status.

KINGDOM	VARCHAR2 No (10)	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 No (100)	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 No (100)	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 No (100)	CLASS_TX
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In biology, class is a taxonomic rank between superclass and subclass. ----- NHIC database field:
CLASS

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

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

ORDER_TAXON	VARCHAR2 No (100)	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
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 (13,0)	No	FAMILY_ID
The NatureServe Identifier assigned a each species nomenclature Family. ----- NHIC database field: FAM_ID			
FAMILY	VARCHAR2 (100)	No	FAMILY
In biology, family is a taxonomic rank between superfamily and subfamily. ----- NHIC database field: FAMILY			
FAMILY_NAME	VARCHAR2 (20)	No	FAMILY_NAM
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
In biology, subfamily is a taxonomic rank intermediate between family and tribe.			
TRIBE	VARCHAR2 (100)	No	TRIBE
In biology, tribe is a taxonomic rank intermediate between subfamily and genus.			
GENUS_ID	NUMBER (13,0)	No	GENUS_ID
The NatureServe Identifier assigned a each species nomenclature Genus. ----- NHIC database field: GENUS_ID			
GENUS	VARCHAR2 (100)	No	GENUS
In biology, genus is a taxonomic rank between tribe and subgenus. ----- NHIC database field: GENUS			
GENUS_NAME	VARCHAR2 (100)	No	GENUS_NAME
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 (100)	No	SUBGENUS
In biology, subgenus is a taxonomic rank intermediate between genus and species.			
SPECIES	VARCHAR2 (100)	No	SPECIES
In biology, a species is a taxonomic rank between subgenus and subspecies.			
SUBSPECIES	VARCHAR2 (100)	No	SUBSPECIES
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_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
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OGF_ID	NUMBER (13,0)	Yes	OGF_ID	
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System generated identifier, unique at the application level.

PROJECT_NAME	VARCHAR2 (100)	Yes	PROJ_NAME	
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Identifies the project associated with species data collection.

PROJECT_START_DATE	DATE	Yes	START_DATE	
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The date when the project began (YYYY-MM-DD).

PROJECT_END_DATE	DATE	No	END_DATE	
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The date when the project ended (YYYY-MM-DD).

STATUS	VARCHAR2 (11)	Yes	STATUS	Completed, In progress, On hold, Planned
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The current status of the project, whether it is planned, in progress, completed or on hold.

LEAD_ORGANIZATION	VARCHAR2 (100)	Yes	LEAD_ORG	
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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	
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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	
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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
SPECIES_PROJECT_ID	NUMBER (13,0)	Yes	PROJECT_ID	
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	
Foreign Key to the parent Species Document Reference table record. ---- System generated 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_SEARCH_IND_NAME_SECURE

For internal OMNR use only: This table stores the documented name of an individual (e.g. a trapper) associated with and identified in historical records. In the chance that the person identified in recent historical records may still be alive, this table is secured in order to be compliant with the Freedom of Information and Protection of Privacy Act (FIPPA).

Column Name	Column Type	Mandatory	Short Name	Valid Values
SPECIES_SEARCH_AREA_ID	NUMBER (13,0)	Yes	AREA_ID	
Foreign Key to the parent Species Search Area table record that the individual is associated to. --- -- System-generated object identifier, unique at the application level.				
ROLE	VARCHAR2 (30)	Yes	ROLE	
Identifies the role associated with the name of the person stored in this table. For example, "Trapper".				
NAME	VARCHAR2 (100)	Yes	NAME	
For internal OMNR use only: The documented name of an individual (e.g. a trapper) associated with and identified in historical records. In the chance that the person identified in recent historical records may still be alive, this table is secured in order to be compliant with the Freedom of Information and Protection of Privacy Act (FIPPA).				
EFFECTIVE_DATETIME	DATE	Yes	EFF_DATE	
Date/time the record was created or last modified in the source database.				

SPECIES_SEARCH_TARGET_LIST

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

Column Name	Column Type	Mandatory	Short Name	Valid Values
SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	0, 1000, 10000, 100000, 100002, 100004, ... (See SPECIES_MASTER_LIST table)
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_SEARCH_TARGET_SPECIES

Identifies one or more specific species that is being searched for within the search area.

Column Name	Column Type	Mandatory	Short Name	Valid Values
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SPECIES_SEARCH_AREA_ID	NUMBER (13,0)	Yes	AREA_ID	
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The ID of the parent Species Search Area record that the identified species is associated to. ----- System-generated object identifier, unique at the application level.

SPECIES_ELEMENT_ID	NUMBER (13,0)	Yes	ELEMENT_ID	180729, 180740, 180742, 220562 (See SPECIES_SEARCH_TARGET_LIST table)
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Foreign Key to the parent species list table. ----- 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 field: ELEMENT_ID

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:
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_DATA_COLL_TYPE_LIST

DATA COLLECTION TYPE	DATA COLLECTION TYPE DESCR	EXPIRY DATETIME
Aerial Survey (FW)	Survey with Fixed-Wing Aircraft	
Aerial Survey (RW)	Survey with Rotary-Wing Aircraft (Helicopter)	
Calving Survey	A search specifically looking for moose/elk/caribou cows accompanied by calves.	
Casual Observation OMNR	Incidental or casual observations made by OMNR staff	
Casual Observation Public	Incidental or casual observations made by the general public.	
Collaring (Telemetry)	A search carried out for the purpose of setting up one or more animals with GPS and/or VHF collars	
DNA Hair Snare Survey	Where hair from a subject species is captured on a hair snare device and later sent in for DNA analysis.	
Denning Survey	A search for the location of subject species den sites (e.g. wolverine).	
Ground Survey	A species search carried out on the ground.	
Historical Record Search	Information about a subject species is searched for in historical records (e.g. old Hudson Bay Company fur harvest records).	
Live-Trapping	Species search carried out with the strategic placement of one or more live traps.	
Moose Winter Survey (MAI)	Moose Aerial Inventory (MAI)	
Remote Camera Survey	Species search carried out with the aid of remote cameras set along specific locations e.g. game trails)	

LIO Lookup Table Values:

SPECIES_SEARCH_TARGET_LIST

SPECIES ELEMENT ID	SCI NAME	COM NAME	EXPIRY DATETIME
180729	Gulo gulo	Wolverine	
180740	Cervus canadensis	Elk	
180742	Alces americanus	Moose	
220562	Rangifer tarandus caribou	Woodland Caribou (Forest-dwelling boreal population)	