

Observational Data Standard - List of Entities and Attributes

OBSERVATION <p>An observation characterizes the occurrence, or documents the lack of occurrence, of an organism or set of organisms through a data collection event at a location. Individual observations are not necessarily independent entities and potentially can be linked through common characteristics such as time, place, protocol, and co-occurring organisms.</p>				
Attribute Name	Required (R), Priority Core (PC), Core (C), Additional (A)	Definition	Notes	Number per Observation Record
IDENTIFICATION ATTRIBUTES		These attributes pertain to the identification of the taxon or community that is the subject of the observation record		
observation ID	R	Unique identifier of the Observation record		1
scientific name	R	The formal name for the taxon or community to the lowest classification level possible with available data		1
verbatim scientific name	A	Name as it appeared in the original source documentation (e.g., field notes, specimen label), if different from	One field per observation, but may contain more than one name if there are multiple sources	0-1
name author	PC	Author of the formal name		0-1
name type	C	Field indicating if the name belongs to a taxon or a community		1
concept reference citation	PC	Citation for the reference that describes or points to the circumscription of the taxon or community		0-1
name used in concept reference	PC	Scientific name used in the concept reference		0-1
author of name used in concept reference	C	Author of the scientific name used in the concept reference		0-1
GUID	A	Global universal identifier of a taxonomic concept	This is a placeholder field. The GUID system is not yet finalized, but this identifier should be included once it is.	0-1
higher classification (multiple fields)	C	For taxa and for communities that are part of a hierarchical classification system, the level(s) above the one represented by the Scientific Name. Examples for species: kingdom, phylum, class, order, family.	Each taxon or community can be within one classification hierarchy consisting of multiple levels	0-1
common name	C	A nontechnical name for the element.		0-1
common name language	C	The language of the common name		0-1
secondary designation	C	One or more other communities or taxa (besides the primary one identified) that this observation may pertain to.	One field, but may contain more than one name	0-1
identification confidence	PC	Confidence that the species or community is correctly identified.	Suggested format: Picklist with values High, Medium, Low.	0-1
provisional name indicator	C	Field for indicating that the identification of the observation may change after further data analysis.		0-1
concept fit	C	(Communities only) Extent to which the community at the observation site fits with the published concept.	Suggested format: Picklist. Possible values include: Fits well; Fits but not tpyal; Possible fit; Just outside	0-1
LOCATION ATTRIBUTES		<p>These attributes pertain to the location of the observation or how it was measured or mapped.</p> <p>*At least one type of priority core (PC) location field is REQUIRED.</p>		
decimal latitude	PC*	The latitude of the location from which the organism or observation was collected, expressed in decimal degrees. Positive values are North of the Equator, negative values are South of the Equator.		0-1
decimal longitude	PC*	The longitude of the location from which the organism or observation was collected, expressed in decimal degrees. Positive values are East of the Greenwich Meridian, negative values are West of the Greenwich Meridian.		0-1
geodetic datum	PC*	The geodetic datum to which the latitude and longitude refer. Datum should be selected from a picklist.	If not known, use "not recorded".	0-1

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verbatim latitude	A	Latitude as it was originally recorded.	To be used if deemed important to record original, uncorrected data or a substantial change was made to original data based on later interpretation.	0-1
verbatim longitude	A	Longitude as it was originally recorded.	To be used if deemed important to record original, uncorrected data or a substantial change was made to original data based on later interpretation.	0-1
verbatim coordinate system	A	Coordinate system as it was originally recorded (geographic, UTM, etc.)	Conditionally required: should be filled in if verbatim latitude and verbatim longitude are used.	0-1
verbatim coordinate units	A	Coordinate units as they were originally recorded (degrees, etc.)	Conditionally required: should be filled in if verbatim latitude and verbatim longitude are used.	0-1
location fuzzed	C	Flag (and/or description of process) if the data have been randomized and/or generalized. This is particularly useful when there are restrictions on sharing precise observation data.	Publisher is the one who indicates that it is fuzzed.	0-1
country	PC*	The country in which the observation location is found. Ideally a picklist using a standard such as the ISO country names or codes.	If the Observation area crosses a national border, more than one country may be listed.	0,1, or more
state or province	C	The state or province in which the observation location is found. Ideally a picklist of standard names or codes.	If the Observation area crosses a state/provincial border, more than one state or province may be listed.	0, 1, or more
county	C	The county or other local administrative unit in which the observation location is found. May be a picklist.	If the Observation area crosses a county border, more than one county more be listed.	0, 1, or more
mapping accuracy	C	Distance within which the location of the observation is believed to be captured.	More analysis is needed to determine whether the distance should be selected from a picklist or entered as a number value.	0-1
mapping accuracy comments	A	Comments related to ability to map the Observation precisely		0-1
mapping comments	C	Comments on other topics related to the mapping of the observation.		0-1
mapping base	A	Scale of the map on which the location is mapped.		0-1
GPS estimated accuracy	A	If location was mapped from GPS coordinates, accuracy recorded by GPS unit in meters or feet		0-1
GPS instrument	A	Make and model of unit		0-1
GPS mode	A	Operating mode and correction method applied to reading.	Suggested format: picklist. Possible values include: 2D, 3D, 2D DGPS, 3D WAAS	0-1
location confidence level	C	Level of confidence that the location was correctly recorded (prior to mapping).	Suggested format: picklist. Possible values: High, Medium, Low	0-1
location confidence comments	A	Comments explaining the location confidence level.		0-1
directions	C	Precise directions to the location of the observation. Should use readily locatable and relatively permanent landmarks.		0-1
location description	PC*	Text description of the location where the observation was made or that was searched.	If the observation cannot be mapped in a GIS and/or coordinates are not provided, this field is required and must be as precise as possible.	0-1
minimum elevation (meters)	C	Minimum elevation of the area covered by the observation. The minimum elevation should represent the lowest altitude in meters, above or below sea level, at which the observation is found. Use negative values for locations below sea level.		0-1
maximum elevation (meters)	C	Maximum elevation of the area covered by the observation. The maximum elevation should represent the highest altitude in meters, above or below sea level, at which the observation is found. Use negative values for locations below sea level.		0-1
minimum depth (meters)	C	Minimum depth at which the observation was made. Use positive values for locations below the earth's surface (subterranean) or under water.		0-1
maximum depth (meters)	C	Maximum depth at which the observation was made. Use positive values for locations below the earth's surface (subterranean) or under water.		0-1

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gis shape ID	PC*	Link to the mapped feature that represents the observation. May be a point, line, or polygon, depending on the nature of the available information and the scale of the map.		0-1
calculated spatial attributes	A	Any additional spatial attributes that can be calculated by a GIS and are of interest to the manager of the observation data.		
DATE/TIME ATTRIBUTES		These attributes pertain to when the observation was made.		
observation date	PC	The date of the observation, consisting of year, month, and day.	This field is populated when date is known precisely and the observation encompassed only 1 day. Dates will be compliant with ISO standards.	0-1
observation year	R	The four-digit year the observation took place.	This is the minimum date information that must be entered.	1
observation month	PC	The month the observation took place.	This field may be populated when the precise date is not known (for example, only the year and month are known).	0-1
observation day	PC	The day of the month that the observation took place.	One programming possibility that has been discussed is that if the user enters year, month, and day, the application would combine them into a formatted date and populate the field observation date "behind the scenes."	0-1
observation season	A	The season the observation took place.	This is an optional modifier that may be useful when only imprecise date information is known.	0-1
observation text date	C	A text field for entering date information when it contains imprecise ranges or modifiers. This is sometimes referred to as a "verbatim date". Examples: "April or May 1995"; "between 1880 and 1890"		0-1
observation start date	C	The precise start date of a data collection event that spanned multiple days.	Used for a range of dates.	0-1
observation end date	C	The precise end date of a data collection event that spanned multiple days.	Used for a range of dates.	0-1
date accuracy	C	Level of accuracy of the date information. If exact date entered, accuracy = "1 day."	Suggested format: picklist. Proposed values are: 1 day, 1 week, 1 month, 3 months, 1 year, 3 years, 10 years, >10 years.	0-1
date accuracy comments	A	Additional information about the date entered in one or more of the date fields. For example, if year is unknown, an explanation of the year selected for entry.		0-1
observation start time	A	The time of day the observation began. Specify hour and minutes (may be rounded to nearest hour), and AM or PM.		0-1
observation end time	A	The time of day the observation ended. Specify hour and minutes (may be rounded to nearest hour), and AM or PM.		0-1
time zone	A	The standard time zone, from a picklist	Conditionally required, if time is recorded.	0-1
OBSERVER ATTRIBUTES		Attributes that pertain to the person(s) who made and/or recorded the observation		
observer name	R	Full name of the person(s) who made or reported the observation or have other knowledge of it. Multiple people with different roles may be recorded.	Although this field is required, "unknown" is an allowed value in cases where this information is not available (e.g., historical data).	1 or more
observer affiliation	C	Institutional affiliation of the observer.		0-1 per observer
verbatim observer name	A	Observer / collector name as it appears in the original source (such as on a specimen label), if different from name in Observer Name field		0-1 per observer
verbatim affiliation	A	Institutional affiliation at the time of the observation, or as it appears in the original source.		0-1 per observer
observer role	A	The role of an observer.	Suggested format: Picklist. Sample values: primary observer, observer, collector, submitter, verifier, etc.	0-1 per observer
observer postal address	A	Mailing address of the observer	Contact information may be stored in a linked Contacts database that has a parsed fields for address components and allows storage of multiple addresses.	0-1 per observer

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observer email address	A	Email address of the observer	Contact information may be stored in a linked Contacts database that allows storage of multiple email addresses.	0-1 per observer
observer phone number	A	Phone number of the observer.	Contact information may be stored in a linked Contacts database that allows storage of multiple phone numbers.	0-1 per observer
observer comments	A	Other comments about the observer.	Not intended as the place to list additional observers, since multiple observers can be linked to each Observation.	0-1 per observer
RESULTS & METHODS ATTRIBUTES				
found indicator	C	Was the element found? (Yes/No). 'No' indicates negative observation data.	"Yes" can be considered the default value.	1
confidence level	C	Level of confidence in search result as indicated by found indicator. Links to picklist: High, Medium, Low		0-1
confidence comment	A	Reasons for confidence level regarding presence or absence, other than search adequacy.		0-1
search adequacy comment	C	Comments on variables that might have affected the outcome of the search, including thoroughness, habitat, methods, environment, observer experience, ease of detection, timing.		0-1
additional inventory needed indicator	C	Is additional inventory of the area needed for this element? Yes/No	Possible values could be expanded to a picklist: Yes-High Priority, Yes-Low Priority, and No.	0-1
reason for additional inventory	A			
level of effort	C	The data collection effort expended for a given observation (positive or negative). May include qualitative comments or a quantitative assessment (e.g., number of person-hours).		0-1
protocol ID	C	Link to information about the Protocol used for collecting data on this observation (optional)		0-1
survey ID	C	Link to survey information. An observation may or may not be part of a survey. A survey may have many observations associated with it.		0-1
search area ID	C	Link to information about the area searched.		0-1
EVIDENCE/DOCUMENTATION ATTRIBUTES				
evidence type	PC	A classification of the type of information on which an Observation record is based. At least one evidence type is required. Similar to the Darwin Core "basis of record".	Suggested format: Picklist. Sample values: Specimen, Sighting, Photograph, Tracks, Literature, Sound Recording, Map.	1 or more
evidence comment	A	Further details or elaboration on the evidence type.	A citation should not be entered in this field. Use Reference Full Citation instead.	0-1 per evidence type
reference full citation	C	Formal citation for the reference for the observation. The citation may be broken down into many component fields, such as author, title, publisher, etc. Should conform to an international standard such as Dublin Core.	Reference data may also be stored in a reference database and linked to the Observation. The Reference ID field shown for other entities (e.g., Survey, Search Area) represents this solution to storing citation data.	0, 1, or more
reference comments	C	General comments about the reference.		0, 1, or more
external documentation ID	C	Link to documentation external to the database/organization managing the Observation data.		0, 1, or more
BIOLOGICAL ATTRIBUTES				
condition of element	C	Comments on the condition of the element at the location (such as alive or dead)		0-1
distribution pattern	C	A rating of the distribution of the element on the landscape (e.g., solitary individual, patchy, scattered, solid cover, matrix, large patch, small patch).	Suggested format: Picklist. More research into possible picklist values is pending; possibly different picklists for taxa and communities, possibly apply a numeric scale.	0-1
migratory use type	C	The descriptive label indicating which season or behavior (e.g., breeding, nonbreeding) is associated with an observation area for migratory animal species that utilize geographically and seasonally disjunct locations.	Applies to seasonally disjunct migratory animals only	0-1

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reproduction evidence indicator	C	Was there evidence that the element was reproducing at the location? Yes/No	Applies to animals or plants	0-1
reproduction evidence comment	A	Comments about reproductive evidence.	Applies to animals or plants	0-1
origin	C	Indication of whether the element is native at the location.	Applies to animals or plants Suggested format: Picklist with values: Native, Nonindigenous, Unknown/undertermined	0-1
invasiveness comments	A	Comments about the degree of invasiveness of the element at the location and time of this observation.	Applies to animals or plants	0-1
total number	C	Estimate of total number of individuals in the observation area. A number may be entered in this field instead of indicating population numbers by life-stage	Applies to animals or plants	0-1
percent cover	C	Cover of the plant in the observation area.	Applies to plants only	0-1
area of cover	?	Area covered by plants (for clonal reproduction or clusters rather than individuals)		
plant life stage	C	The life stage(s) of the plants seen during the visit. More than one life stage may be selected if applicable, and additional information (sex, number) recorded for each.	Suggested format: Picklist. Sample values: vegetative, flowering, and fruiting	0, 1, or more
animal life stage		The life stage(s) of the animals seen during the visit. More than one life stage may be selected if applicable, and additional information (sex, number) recorded for each.	Suggested format: Picklist. Sample values: eggs, immature, juvenile, adult	0, 1, or more
number of individuals in each life stage	C	Number of individuals seen during the visit.	Applies to animals or plants	0-1 per life stage
estimated or observed (per life stage)	C	Indicator of whether the number of individuals is an estimate or a true count.	Applies to animals or plants	0-1 per life stage
sex	C	The sex of individuals seen during the visit.	Applies to animals only Suggested format: picklist.	0-1 per number per life stage
strata	C	Vegetation strata in the community.	Applies to ecological communities Suggested format: picklist.	0, 1, or more
percent cover per stratum	C	Percent cover by stratum	Applies to ecological communities	0-1 per stratum
ENVIRONMENTAL ATTRIBUTES				
habitat description	C	Text description of the local or surrounding habitat.		0-1
IUCN habitat category	C	Habitat type selected from a standard list.	Suggested format: Picklist of IUCN habitat categories.	0-1
alternate habitat classification	A	Habitat category in a classification system other than the IUCN system		0-1
alternate habitat classification system	A	Name of the alternate habitat classification system used		0-1
IUCN threat category	A	IUCN category of the primary threat affecting the species or community at the location of the observation	Suggested format: Picklist of IUCN threat categories.	0-1
threat comments	A	Comments about primary or additional types of threats		0-1
management needs	C	The most important management needs (for enhancement or control) for the element at this observation location.		0-1
management activities	C	Management activities conducted when the observation was made (e.g., pulling or applying pesticides to invasives, controlled burning, etc.)		0-1
size of observation	A	Quantitative measure of the area or abundance, along with comments on how the measurement was taken or estimated.		0-1
landscape context	A	Comments on abiotic and biotic factors in the immediate surroundings of the observation.		0-1
condition of site	A	Comments on the condition of the surroundings at the observation location. Assessment of habitat quality as it pertains to the element being observed		0-1
weather	C	Description of the weather conditions when the visit was made.		0-1
OTHER INFORMATION				
data sensitive indicator	C	Y / N flag that the observation information is sensitive		0-1

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reason data sensitive	C	The primary reason why the data are sensitive.	Suggested format: Picklist. Possible values include: Data Sensitive: private land; Data Sensitive: sensitive species (tends to be overcollected or hated); Data Sensitive: sensitive location (nest); Data Sensitive: data donor; Data Sensitive: data donor; Not Sensitive: private land - public data source; Not Sensitive: private land - public data source; Not Sensitive: ROW on private land (right of way)	0-1
reason data sensitive comments	A	Further information on the reason(s) data is sensitive		0-1
general comments	A	General comments about the observation that are not addressed elsewhere.		0-1
internal notes	A	Comments or issues about this observation record that are internal to the organization that created the record	Not for publication / sharing. This field will not be included in the data sharing schema.	0-1
ASSOCIATED ELEMENTS These attributes pertain to other taxa or communities known to occur in the vicinity of the observation but for which individual observation records might not be created.				
associated element scientific name	C	The scientific name of the associated element	Multiple elements may be associated with an observation	0, 1, or more
concept reference citation	C	Citation for the reference that describes or points to the circumscription of the taxon or community		0-1 per associated element
name used in concept reference	C	Scientific name used in the concept reference		0-1 per associated element
author of name used in concept reference	C	Author of the scientific name used in the concept reference		0-1 per associated element
associated element origin	A	Indication of whether the element is native at the location.	Applies to animals or plants Suggested format: Picklist with values Native, Nonindigenous, Unknown/undertermined	0-1 per associated element
associated element relationship comments	A	The relationship of the associated element to the observation element		0-1 per associated element
OTHER ENTITIES RELATED TO OBSERVATIONS				
OBSERVATION GROUPING A set of individual observation records that are grouped in the data management system owing to some common characteristic. Records that represent revisits to the same area for monitoring purposes can be linked together through this entity.				
observation grouping ID	R for Observation Grouping	Unique identifier of an Observation Grouping record.		1 per grouping
observation grouping name	A	An informal name or label for the grouping.		0-1 per grouping
observation grouping comments	A	Comments about the observation grouping.		0-1 per grouping
observation grouping criteria	C	The common characteristic or other criteria used to group the observations (same element, same location, or any other criteria).	Possible picklist with ability to specify "Other"	0-1 per grouping
monitoring comments	A	When the grouping represents revisits to a previous observation, use this field for comments about observed changes, trends, and population dynamic		0-1 per grouping
observation grouping owner	C	The person who created the observation grouping.		0-1 per grouping
protocol ID	A	Link to the Protocol used for the group of observations, for example a particular monitoring protocol.	An observation grouping may be linked to a protocol, and observations within the grouping may also be linked to a protocol.	0-1 per grouping
observation ID	R	Link to the Observation.		more than 1 per grouping
SURVEY A coordinated effort to gather presence/absence and possibly other information on taxa or communities within a defined area. A Survey record may be created for a future event (i.e., a planned survey that has not been carried out yet) as well as for a completed survey.				
survey ID	R for Survey	Unique identifier of a Survey record.		1 per survey
project ID	A	Link to the Project that includes this Survey.		0-1 per survey

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protocol ID	A	Link to the Protocol(s) used for the survey.		0, 1, or more per survey
survey name	A	Name of the survey.		0-1 per survey
survey manager	C	Name of the survey manager(s).		0-1 per survey
start date	C	Date the survey began or will begin.		0-1 per survey
end date	C	Date the survey ended or will end.		0-1 per survey
status	C	Description of the status of the survey (examples: planned, in progress, completed)		0-1 per survey
survey comments	A	Descriptive comments about the Survey. Should not include data for which fields exist in the Observation or related records.	Information on date and personnel involved in a Survey, as well as information on results is managed in the related Observation record.	0-1 per survey
reference ID	A	Link to an internal Reference record.		0, 1, or more per survey
external documentation ID	A	Link to documentation external to the Observation database		0, 1, or more per survey
SEARCH AREA The area in which a search was conducted. For each Search Area, a mapped representation may exist in GIS. The boundaries of a Search Area may be identical to a plot, a Conservation Site, a Managed Area, or some other predefined area.				
search area ID	R for Search Area	Unique identifier of a Search Area record.		1 per search area
survey ID	C	Link to the Survey record.		0, 1, or more per search area
search area name	C	A formal or informal name for the Search Area		0-1 per search area
search area description	A	A description of relevant aspects of the search area, such as habitat, geology, land use, etc.		0-1 per search area
gis shape ID	C	Link to the GIS shape.		0-1 per search area
decimal latitude	C	The latitude of the centrum of the Search Area, expressed in decimal degrees. Positive values are North of the Equator, negative values are South of the Equator.		0-1 per search area
decimal longitude	C	The longitude of the centrum of the Search Area, expressed in decimal degrees. Positive values are East of the Greenwich Meridian, negative values are West of the Greenwich Meridian.		0-1 per search area
geodetic datum	C	The geodetic datum to which the latitude and longitude refer. Datum should be selected from a picklist (domain table).	If not known, use "not recorded."	0-1 per search area
sample shape type	C	The shape of the survey site, from a picklist.		0-1 per search area
other_defined_area_id	A	Link to a record about a managed area or site if the search area is contained within another legally or ecologically defined area.		0-1 per search area
reference ID	A	Link to an internal Reference record.		0, 1, or more per search area
external documentation ID	A	Link to documentation external to the Observation database		0, 1, or more per search area
SPECIES LIST A list of taxa recorded from the same Search Area as an Observation. Differs from a list of Associated Elements in that information on vegetation stratum and cover can be recorded for each species. For example, may be used for to list constituent species of a vegetation community, where the community itself is the subject of the linked Observation record.				
species list ID	R for Species List	Unique identifier of a Species List.		1 per species list
observation ID	R	Link to an Observation record		1 per species list
search area ID	R	Link to a Search Area.		1 per species list
scientific name	R	The formal name for the taxon.		1 per species
concept reference citation	C	Citation for the reference that describes or points to the circumscription of the taxon or community		0-1 per species
name used in concept reference	C	Scientific name used in the concept reference		0-1 per species

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author of name used in concept reference	C	Author of the scientific name used in the concept reference		0-1 per species
origin	A	Indication of whether the species is native at the location.	Applies to animals or plants Suggested format: Picklist with values Native, Nonindigenous, Unknown/undertermined	0-1 per species
stratum	C	The vegetation stratum/strata in which the species occurs. A plant may be in more than one stratum, and percent cover/cover class should be recordable for each stratum for each species.	Suggested format: Picklist	0, 1 or more per species
cover class	C	For each species, the cover class category that represents its percent cover in a particular stratum.	There may need to be more than one cover class attribute to accommodate different cover classification systems.	0-1 per stratum
percent cover	C	Percent cover by stratum	May need other percent cover fields like maximum, minimum, mean.	0-1 per stratum
number (per species)	A	Abundance of the species expressed as a number		0-1 per species
estimated or counted (per species)	A	Indicator of whether the number is an estimate or a true count.		0-1 per species
PROTOCOL The plan or procedure used to collect the data. This can be either a formal, published protocol or an informal procedure.				
protocol ID	R for Protocol record	Unique identifier of a Protocol record.		1 per protocol
protocol name	A	A formal or informal name for the protocol.		0-1 per protocol
protocol description	C	Text description of the protocol / methods used		0-1 per protocol
protocol type	C	The type of protocol.	Suggested format: Picklist	0-1 per protocol
reference ID	A	Link to an internal Reference record.		0, 1, or more per protocol
external documentation ID	A	Link to documentation external to the Observation database		0, 1, or more per protocol
PROJECT This table contains basic information about an overarching project that may include one or more surveys as part of the work plan. It is not exclusively part of the Observation standard and may be linked to other databases. It is not meant for managing detailed data about projects but rather serves as a pointer (through a reference) to more complete information that is managed externally.				
project ID	R for Project record	Unique identifier of a project.		1 per project
project name	C	Name of the project.		0-1 per project
project manager	C	Name of the project manager(s).	Should link to contact information.	0-1 per project
project manager organization	A	Organization for which the project manager works.		0-1 per project
start date	A	Date the project began or will begin.		0-1 per project
end date	A	Date the project ended or will end.		0-1 per project
status	A	Description of the status of the project.		0-1 per project
project comments	A	General comments about the project.		0-1 per project
reference ID	A	Link to an internal Reference record.		0, 1, or more per project
external documentation ID	A	Link to documentation external to the Observation database		0, 1, or more per project
EXTERNAL DOCUMENTATION Stores identifiers for documentation that is external to the database housing Observations. Storing the pointer to the external source eliminates the need to re-enter data that is managed elsewhere.				
external documentation ID	R for External Doc	System-generated number that uniquely identifies a record in this table.		1 per external doc
external identifier	R	Identifier of the documentation. May be a catalog number, data record id, specimen id, plot id, etc.		1 per external doc
external documentation type	A	Type of documentation (probably from a pick list)		0-1 per external doc

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external organization	R	Organization that maintains/houses the documentation. The organization and external identifier together should be an unique combination that will allow the data to be correctly differentiated in the external (source) database.		1 per external doc
external documentation notes	A	Further information about the external documentation.		0-1 per external doc
reference ID	A	Link to an internal Reference record. If desired, the user can create a full Reference record for the external database and include a link to that reference by the use of the reference ID.		0-1 per external doc