# Metadata for the Lower Green Bay and Fox River Area of Concern Biota Database

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# What is the Lower Green Bay and Fox River Area of Concern (LGB&FR AOC) Biota Database?

In an effort to gather all available information pertaining to LGB&FR AOC fish and wildlife populations and habitat, the University of Wisconsin-Green Bay assembled annotated lists of all known and expected species of vertebrates, vascular plants, and invertebrates of conservation concern or special ecological significance found within 1 km inland of the ordinary high water mark of the LGB&FR AOC boundary. These annotated species lists were compiled and organized into an easy-to-use, searchable MS Access database documenting species presence within 1 km inland of the LGB&FR AOC.

The most up-to-date LGB&FR AOC database file is "AOCBiota\_DB\_ShareableVersion\_20180315.accdb".

# How Are the Data Organized in the LGB&FR AOC Biota Database?

Each record in the LGB&FR AOC Biota Database contains all relevant information pertaining to a single species (or in some cases just taxon), including scientific and common names, taxon group to which it belongs, federal and state statuses, smaller project area in which it was found (e.g., Peter's Marsh), and data source.

#### Who Are the Primary Data Contributors of the LGB&FR AOC Biota Database?

Sixty-nine different people, organizations, universities, and agencies contributed data to the LGB&FR AOC Biota Database. In some cases, the UW-Green Bay project team contacted individual people requesting information or data that document species' presence in the LGB&FR AOC, which were then incorporated into the database with permission. In other instances, the UW-Green Bay team compiled information from publicly available sources, such as scientific manuscripts, technical reports, websites, and books.

#### How Can the LGB&FR AOC Biota Database Be Used?

One can use this biota database in order to determine what species or taxa are known or expected to occur within the LGB&FR AOC based on the entire area or within smaller specific regions or project areas. One can turn filters on and off in order to just view taxon (e.g., Birds) or subtaxon (e.g., Anurans) specific lists or any other field with a filter.

# Who Built and Entered Data into the LGB&FR AOC Biota Database?

Under the guidance of UW-Green Bay's Dr. Robert Howe and Dr. Amy Wolf, former UW-Green Bay graduate student, Stephanie Beilke, and Cofrin Center for Biodiversity's Senior Research Specialist, Erin Giese, designed the original database. Stephanie Beilke, Samantha Nellis, Sahara Tanner, Emily Vandersteen, Maria Otto, and Erin Giese entered new species records into the database. Maria Otto and Erin Giese proofread the final database.

# What Information Do Each of the LGB&FR AOC Biota Database Tables Contain?

Please read below for a list of the 16 tables in the LGB&FR AOC Biota Database followed by a table describing each of its fields.

**Table "AOC\_BiotaList":** Contains 1,781 records of species or taxa that have been found to or are expected to occur in the LGB&FR AOC. Six of the records are plant communities.

Field	Description
ID	unique identifier for a single species or taxon record
SciName	scientific name of species; in some cases, only the class, order, family, or genus were known
AltSciName1	previously known scientific name of a species (i.e., old name)
AltSciName2	previously known scientific name of a species (i.e., old name)
ComName	common name of species if known
Taxon	taxon group a species belongs to (e.g., amphibians, plants, fish)
Subtaxon	sub-taxon group a species belongs to (e.g., anurans, shrubs, clams)
ConservationCode	conservation code for birds only; source: http://www.wisconsinbirds.org/plan/species/priority.htm
FedStatus	federal status (endangered or threatened) of a species if applicable; source: http://www.fws.gov/endangered/
StateStatus	state status (e.g., Special Concern, endangered) of a species if applicable; source: http://dnr.wi.gov/topic/WildlifeHabitat/
IUCNStatus	International Union for Conservation of Nature and Natural Resources status (e.g., vulnerable, least concern); source: http://www.iucnredlist.org/
GlobalStatus	NatureServe Global Conservation Status Ranks; source: http://explorer.natureserve.org/granks.htm
NativeStatus	species native status
BreedingStatus	breeding bird code
ProjectArea	small project area (e.g., Peter's Marsh, Fox River Mouth) within the AOC that a species was known or expected to occur
Region	larger region (e.g., West Shore, Fox River, LGB&FR AOC) that a species was known or expected to occur
State Rank	state rank (e.g., S3) Wisconsin Department of Natural Resources Natural Heritage Inventory 2014; source: http://dnr.wi.gov/topic/NHI/WList.html
RAP Noted	whether a species was listed in the original Remedial Action Plan
EconRecValue	whether a species has economic or recreational value; this field was not used consistently and could therefore be missing some entries
References	data source to which a species or taxon originated
Date of Entry	date that a biota database record was entered

Notes	any relevant note(s) pertaining to a biota datase record
Year of Observation	most recent year a species or taxon was documented
CoeffOfConserv	coefficient of conservatism (CC) value assigned to plant records; source: file "WI_PLANTS_23JAN2017.xlsx" given to Erin Giese by Donalea Dinsmore in early 2017; Donalea indicated this was the Wisconsin Department of Natural Resources' most up-to-date values
WetlIndic	wetland plant indicator code that helps to identify plants that tend to be more or less of a wetland plant; source: file "2016WIPlantList.xlsx" given to Erin Giese by Donalea Dinsmore in early 2017

 Table "BreedingCodes": Contains breeding bird codes. 7 records. Source: Wisconsin Breeding Bird Atlas.

 2014. http://wsobirds.org/images/atlas/WBBA\_II\_Handbook.pdf.

Field	Description
Breeding Code	breeding bird code (e.g., PO = possible breeding)
Definition	full written name of breeding code
Qualifying Behaviors	description of breeding code

**Table "ConservationCodes":** Contains codes to identify birds that are listed under regional or national conservation plans (e.g., PIF) or watch lists. 5 records. Source: Wisconsin Bird Conservation Initiative, Wisconsin Department of Natural Resources. 2013. Wisconsin All-Bird Conservation Plan. Madison, WI. <a href="http://www.wisconsinbirds.org/plan/species/priority.htm">http://www.wisconsinbirds.org/plan/species/priority.htm</a> (K. Kreitinger, Y. Steele & A. Paulios, editors. 2.0).

Field	Description
Conservation Codes (CC)	bird conservation code (e.g., PIF) that indicates whether a bird species is listed in a plan or watch list
Description	description of a bird conservation code

**Table "FederalStatus":** Contains federal status for a species (e.g., Endangered). 4 records. Source: U.S. Fish and Wildlife Service: <u>http://www.fws.gov/endangered/</u>.

Field	Description
Federal Status	federal status of a species or taxon (e.g., Threatened)

**Table "GlobalStatus":** Contains global status for a species (e.g., G2). 6 records. Source: NatureServe Global Conservation Status Ranks <u>http://explorer.natureserve.org/granks.htm</u>.

Field	Description
Global Status	federal status of a species or taxon (e.g., G2)
Definition	description of global status

**Table "IUCN":** Contains IUCN status for a species (e.g., NT). 9 records. Source: International Union for Conservation of Nature and Natural Resources. 2014. IUCN Red List of Threatened Species. <u>http://www.iucnredlist.org/</u>.

Field	Description
IUCN Status	IUCN status of species or taxon (e.g., VU)
Description	description of IUCN status

Table "NativeStatusCodes": Contains a listing of whether a species is native or not. 4 records.

Field	Description
Code	native or introduced status of species or taxon
Description	description of native status code

**Table "ProjectAreas":** Contains a list of the 17 project areas (including "NA" and "Unknown") within the LGB&FR AOC that species and taxon are known or expected to occur.

Field	Description
PA_Code	project area (e.g., Peter's Marsh) within the Lower Green Bay and Fox River Area of Concern that a species or taxon was found or is expected to occur
Description	description of project area; metadata on how project areas were formed found in file "AOC_BiotaDB_ProjectArea&RegionSelection_20171103.docx"
Region	region (e.g., Lower Bay) within the LGB&FR AOC that a species or taxon was found or is expected to occur

**Table "References":** Contains a list of the data sources to which information on a species or taxon originated. 75 records. Note that for field guides or sources that indicated that a species is expected or known to occur in a larger area, say Brown County, then the species was recorded as being found within the region "LGB&FR AOC" but nowhere else specific. In some cases, all sources that recorded a species or taxon are listed; in other cases, just a single reference (or two) was listed.

Field	Description
Source	data source to which information on a species or taxon originated
Description	description or title of data source
File Names	file name(s) of data source
Citation	reference citation listed, if applicable
Permission to Publicize Species List in Database?	description of permission granted for publicizing the information listed in this database
ID	unique record identifier created by MS Access

**Table "Regions":** Contains a list of 8 regions (including "Unknown," "LGB&FR AOC," and "N Bay of GB") within the LGB&FR AOC that species and taxon are known or expected to occur.

Field	Description
Region	region (e.g., Fox River) within the Lower Green Bay and Fox River Area of Concern that a species or taxon was found or is expected to occur
Description	description of region; metadata on how regions were formed found in file "AOC_BiotaDB_ProjectArea&RegionSelection_20171103.docx"

**Table "StateRank":** Contains a list of state rank codes (e.g., S2) for a species. 10 records. Source: Wisconsin Department of Natural Resources. Natural Heritage Inventory. <u>http://dnr.wi.gov/topic/NHI/</u><u>WList.html</u>.

Field	Description
Rank	state rank (e.g., S4) of species or taxon
Description	description of state rank code

**Table "StateStatus":** Contains a list of state statuses (e.g., Special Concern). 4 records. Source: WI Department of Natural Resources. <u>http://dnr.wi.gov/topic/endangeredresources/etlist.html</u>.

Field	Description
ID	unique record identifier created by MS Access
State Status	state status of a species or taxon (e.g., Threatened)

Table "Subtaxon": Contains a list of subtaxon (e.g., Bats) that a species or taxon belongs to. 30 records.

Field	Description
ID	unique record identifier created by MS Access
Taxon	taxon to which a species belongs (e.g., Mollusks)
Field1	subtaxon to which a species belongs (e.g., Clams)

**Table "TaxaCodes":** Contains a list of taxa (e.g., Amphibians) that a species or taxon belongs to. 15 records.

Field	Description
Таха	taxa to which a species belongs (e.g., Fish)

**Table "WetlandPlantIndicatorCodes":** Contains a list of wetland plant indicator codes (e.g., FAC). 6 records. Source: Data originated from WDNR's Donalea Dinsmore's table in files "2016WIPlantList.xlsx" and "WI\_PLANTS\_23JAN2017.xlsx".

Field	Description
ID	unique record identifier created by MS Access
IndicatorCode	wetland plant indicator code (e.g., FAC)
IndicatorStatus	description of plant indicator code
Designation	wetland plant designation in terms of whether the plant is a hydrophyte or non- hydrophyte
Description	written description of plant indicator code

**Table "WetlandPlantIndicatorCodes":** Contains information generated from the Wisconsin Department of Natural Resources 2014 Wildlife Action Plan. <u>http://dnr.wi.gov/topic/wildlifehabitat/</u><u>actionplan.html</u>. 481 records.

**Form "AOC\_BiotaList":** A form for entering new data into the main database table "AOC\_BiotaList." Note, one can enter new data directly into table "AOC\_BiotaList" as well.

# **Contact Information:**

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