WHAT IS XML?

Choosing the XML option will create a file in extensible markup language (XML) format. The file may be downloaded and imported into Access, SQL Server, or some other database management system. The file will contain project, applicant, location and take information for each project that matches the criteria entered. Because the records are sequentially numbered, you should import each XML file into its own database.

HOW TO IMPORT XML FILES INTO A MICROSOFT ACCESS™ DATABASE

These instructions explain the process for importing data retrieved from the APPS Search screen in XML format into a Microsoft Access™ database. You will be using two files for this process.

The first file is the XSD file. It can be obtained by clicking on one of the "Download XSD" links on the Search page. Please note that file you download depends on whether you are processing Project records or Report records. When prompted to "Open" or "Save" the file, choose the "Save" option to save the file to your computer. The XSD file contains the definitions of the tables and fields that will be included in the XML file. When you import the XSD file, it will set up all the tables with fields that are the correct data type and length. It also provides descriptions for each field. If you do not import the XSD file, most information in the database will still be imported, but the Abstract field in the ProjectApp table will be truncated to 255 characters and you will not have the benefit of field descriptions. The tables and the relationships between them are shown in a relationship diagram later in this document.

The second file is the XML file. This file actually contains the data that was returned from your search. The data is laid out in XML format, with each data element beginning and ending with a descriptive tag.

Instructions for Importing into a Microsoft Access™ database.

1) On the APPS Search page, enter your search criteria and choose XML as the result type.
2) Process the search and save the resulting file to your computer. Be sure to note the name and location of the file as you will need it later.
3) Download the XSD file. This file contains the definitions of the tables and fields included in the XML file.
   a. Download XSD for Projects will get the XSD file for Project records.
   b. Download XSD for Reports will get the XSD file for Report records.
   You should now have both a XML and a XSD file saved on your computer.
4) Create a new Access database.
5) Open the new database
6) In Access 2007 and 2010, click on the "External Data" tab.
7) Select "XML File" to import an XML file.
8) When the "Get External Data – XML File" window comes up, enter the name of the XSD file that you downloaded in step 3 into the "File name:" field or Browse to find the file. It is important that you import the XSD file BEFORE importing the XML file.

9) After selecting the File name and pressing the OK button, the "Import XML" window will come up showing all the tables that will be created. Click on the OK button to create the tables.

10) If the file was successfully imported, a window ("Get External Data – XML File") will come up. Close this window.

11) Repeat steps 6 through 10 with the following changes:

    a. This time enter the name of the XML file in step 5 when you are asked to provide the name of the file to import.

    b. When the Import XML window comes up, change the Import Options to "Append Data to Existing Table(s)".

12) Your database is now ready to use.

TABLE LAYOUTS FOR PROJECTS

Applicant – Person or Organization applying for the permit

Field Name	Description	Type
ProjectAppID	Unique ID of this project record.	Byte or long integer
firstname	Applicant's first name, if any.	Text
lastname	Applicant's last name, if any.	Text
organization	Applicant's organization name, if any. If an agency or organization is the applicant, this may be the only field filled out.	Text

Location – Locations where the projects will be carried out

Field Name	Description	Type
locID	Unique ID of this location in the dataset. Note that this number is not unique across different exported datasets.	Byte or long integer
ProjectAppID	Unique ID of the project record.	Byte or long integer
locationdescription	Text description of the location.	Text
longitudeE	Longitude of the eastern-most point of the location.	Text
longitudeW	Longitude of the western-most point of the location.	Text
latitudeN	Latitude of the northern-most point of the location.	Text
latitudeS	Latitude of the southern-most point of the location.	Text

Permit – Types of permits required for the project

Field Name	Description	Type
ProjectAppID	Unique ID of the project record	Byte or long integer
permittype	Type of permit that the user applied for. In some cases, more than one permit type might be required.	Text

dateissued	Date the permit was issued.	Date
dateexpired	Date the permit expired.	Date

ProjectApp – Main project record

Field Name	Description	Type
ProjectAppID	Unique ID of the project record. Note that this is not unique across different datasets.	Byte or long integer
filenumber	File number for the project record.	Text
title	Title of the project.	Text
abstract	Brief abstract describing the project.	Text

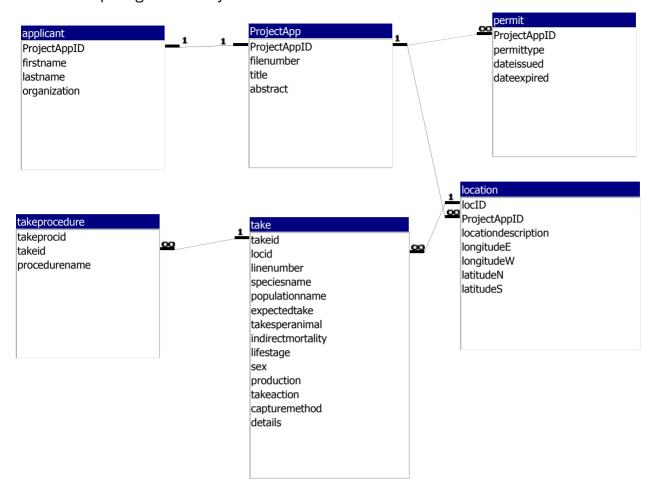Take – Records detailing the take actions that will be done

Field Name	Description	Type
takeid	Unique ID of the take record. Note that this is not unique across different datasets.	Byte or Long integer
locid	ID of the location record.	Byte or long integer
linenumber	Number of the line in the take table for the location. This is not unique across locations, but is unique within a single location.	Byte
speciesname	Name of the species being taken	Text
populationname	Name of the population or stock being taken	Text
expectedtake	Estimated number of animals to be taken	Byte or long integer
takesperanimal	Number of takes per animal, if multiple takes on individual animals	Byte or long integer
Indirectmorality	Estimate of the number of animals that might be indirectly (unintentionally) killed as a result of this take action	Byte or long integer
lifestage	Lifestage of the animals being taken	Text

sex	Sex of the animals being taken	Text
production	Production (natural or wild)	Text
takeaction	Action that will be done	Text
capturemethod	How animals will be captured	Text
details	Additional details about this record, if any.	Text

TakeProcedure – Procedures being done on the animals that will be taken

Field Name	Description	Type
takeprocid	Unique ID of the take procedure record. Note that this is not unique across different datasets.	Byte or Long integer
takeid	ID of the take record.	Byte or long integer
procedure	Number of the line in the take table for the location. This is not unique across locations, but is unique within a single location.	Byte

Relationship Diagram for Projects

applicant
ProjectAppID
firstname
lastname
organization

1 —— 1

ProjectApp
ProjectAppID
filenumber
title
abstract

1

permit
ProjectAppID
permittype
dateissued
dateexpired

location
locID
ProjectAppID
locationdescription
longitudeE
longitudeW
latitudeN
latitudeS

1

takeprocedure
takeprocid
takeid
procedurename

1

take
takeid
locid
linenumber
speciesname
populationname
expectedtake
takesperanimal
indirectmortality
lifestage
sex
production
takeaction
capturemethod
details

TABLE LAYOUTS FOR REPORTS

Applicant - Person or Organization who applied for the permit

Field Name	Description	Type
ProjectReportID	Unique ID of this report record.	Byte or long integer
firstname	Applicant's first name, if any.	Text
lastname	Applicant's last name, if any.	Text
organization	Applicant's organization name, if any. If an agency or organization is the applicant, this may be the only field filled out.	Text

Location – Locations where the projects were carried out

Field Name	Description	Type
locID	Unique ID of this location in the dataset. Note that this number is not unique across different exported datasets.	Byte or long integer
ProjectReportID	Unique ID of the report record.	Byte or long integer
locationdescription	Text description of the location.	Text
longitudeE	Longitude of the eastern-most point of the location.	Text
longitudeW	Longitude of the western-most point of the location.	Text
latitudeN	Latitude of the northern-most point of the location.	Text
latitudeS	Latitude of the southern-most point of the location.	Text

Permit – Types of permits required for the project

Field Name	Description	Type
ProjectReportID	Unique ID of the report record	Byte or long integer
permittype	Type of permit that the user applied for. In some cases, more than one permit type might be required.	Text

dateissued	Date the permit was issued.	Date
dateexpired	Date the permit expired.	Date

ProjectReport - Main report records

Field Name	Description	Type
ProjectReportID	Unique ID of the project record. Note that this is not unique across different datasets.	Byte or long integer
filenumber	File number for the project record.	Text
datereportstart	Start date of the period being reported on	Date
datereportend	End date of the period being reported on	Date
reportstatus	Status of the report	Text
title	Title of the project.	Text
abstract	Brief abstract describing the project.	Text

Take – Records detailing the take actions that were done

Field Name	Description	Type
takeid	Unique ID of the take record. Note that this is not unique across different datasets.	Byte or Long integer
locid	ID of the location record.	Byte or long integer
linenumber	Number of the line in the take table for the location. This is not unique across locations, but is unique within a single location.	Byte
speciesname	Name of the species being taken	Text
populationname	Name of the population or stock being taken	Text
expectedtake	Estimated number of animals to be taken	Byte or long integer
takesperanimal	Number of takes per animal, if multiple takes on individual animals	Byte or long integer

actualtake	Actual number of animals to be taken	Byte or long integer
Indirectmorality	Estimate of the number of animals that might be indirectly (unintentionally) killed as a result of this action	Byte or long integer
actualindirectmorality	Actual number of animals indirectly or unintentionally killed	Byte or long integer
lifestage	Lifestage of the animals being taken	Text
sex	Sex of the animals being taken	Text
production	Production (natural or wild)	Text
takeaction	Action that will be done	Text
capturemethod	How animals will be captured	Text
details	Additional details about this record, if any.	Text

TakeProcedure - Procedures that were done on the animals that were taken

Field Name	Description	Type
takeprocid	Unique ID of the take procedure record. Note that this is not unique across different datasets.	Byte or Long integer
takeid	ID of the take record.	Byte or long integer
procedure	Number of the line in the take table for the location. This is not unique across locations, but is unique within a single location.	Byte

Relationship Diagram for Reports

applicant
ProjectReportID
firstname
lastname
organization

ProjectReport
ProjectReportID
filenumber
reportnumber
reportstatus
datereportstart
datereportend
title
abstract

permit
ProjectReportID
permittype
dateissued
dateexpired

takeprocedure
takeprocid
takeid
procedurename

take
takeid
locid
linenumber
speciesname
populationname
expectedtake
actualtake
takesperanimal
indirectmortality
actualindirectmortality
lifestage
sex
production
takeaction
capturemethod
details

location
locID
ProjectReportID
locationdescription
longitudeE
longitudeW
latitudeN
latitudeS