Biotics Mapping Worksheet

1. Demo of Basics
2. Demo of Map Resources
3. Perform **Map Resources** section of the Hands-On Training
   - Access the Biotics Pilot according to the Biotics Instance assigned to your program by clicking on the Biotics Instance link
   - Open the online help and navigate to the Hands-On Training to obtain your login credentials
4. Demo of Map Navigation
5. Perform **Map Navigation** section of the Hands-On Training
6. Demo of Map Tools
7. Perform **Map Tools** section of the Hands-On Training
8. Demo and discussion of Example 1 in Worksheet
9. Demo and shadow of Example 2 in Worksheet
10. Perform Example 1 of **Create Features** section of the Hands-On Training
11. Demo and discussion of Example 3 in Worksheet
12. Perform Example 2 of **Create Features** section of the Hands-On Training
13. Demo and discussion of Example 4 in Worksheet
14. Perform Example 3 of **Create Features** section of the Hands-On Training
15. Demo and discussion of Example 5 in Worksheet
16. Perform **Example 4** of **Create Features** section of the Hands-On Training
17. Perform **Example 5** of **Create Features** section of the Hands-On Training (data collected in field)

As time allows

- Review data collected in the field for one or two existing EOs.
- Enter new data collected in the field
- Demo trickier examples in the Worksheet (Example 4, shoreline)
- Demo based on specific questions raised

Additional Options

Done it a million times and bored senseless by this training or just working through it more quickly than the pace of the class? Here are some additional options for hands-on activities:

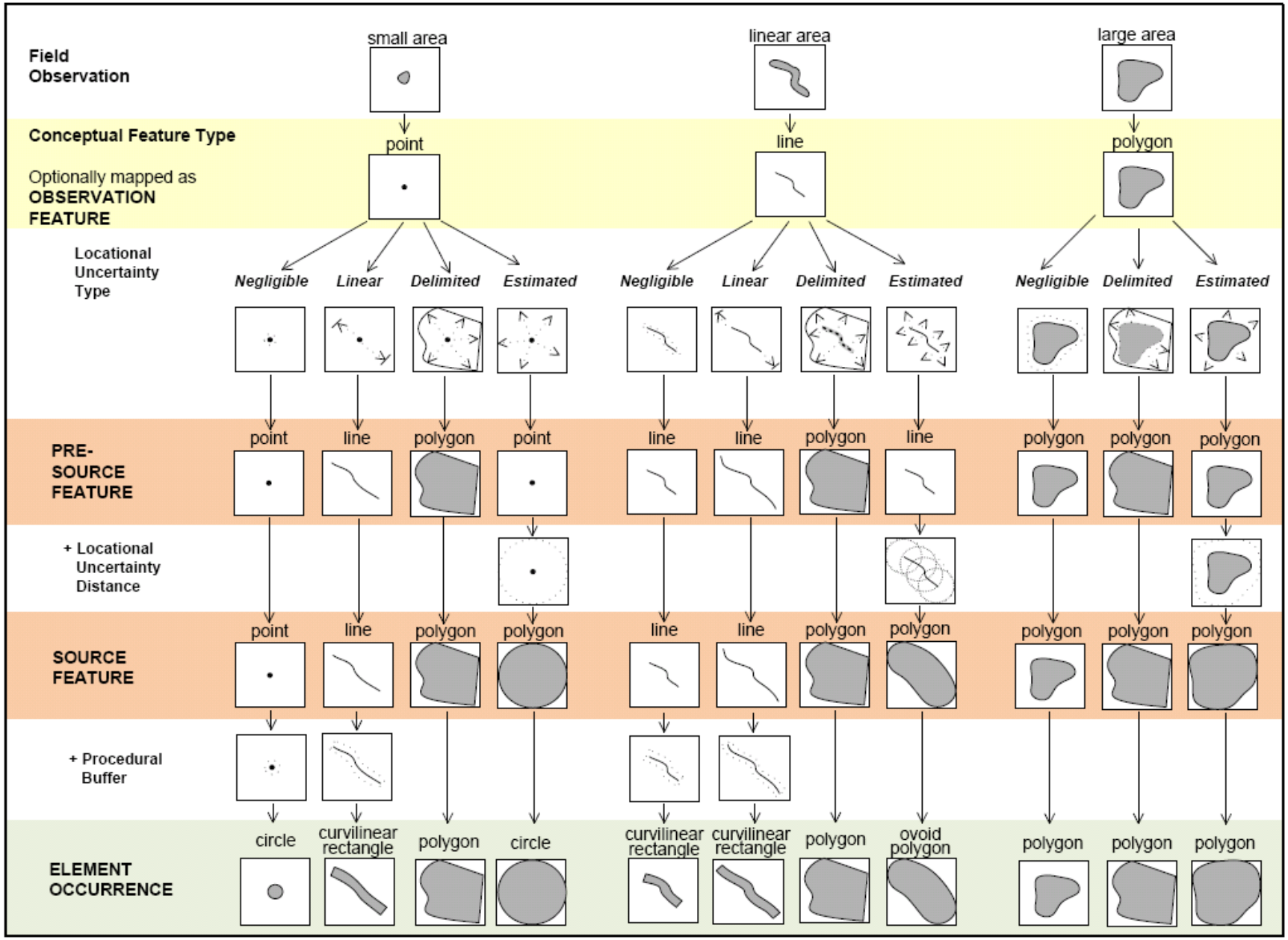
- Create the Source Features & EOs in this worksheet
  - Download **Lake_Zoom.zip** file from https://tranxfer.natureserve.org/download/Longterm/Biotics/Biotics5/ for Little Whaley Lake, Ludington Lake, and Whaley Lake referenced in Exercises 4, 7, 8, & 9.
- Enter data collected in field
- Go through the Tutorial in the online help (i.e. Help Documentation link in footer of every Biotics 5 page)
- Do some Advanced Editing!
- Do the Finding Data training

Want more training?

A variety of training topics can be found listed in the Training Webinars help topic, but training specific to the Map include:

- Map Session I: Map Content & Tools
- Map Session II: Creating Features
- Map Session III: Modifying & Deleting Features

Summary of Spatial Feature Development



Representation Accuracy Key

1. *Locational Uncertainty Type* is Negligible.....RA is **Very high**
1. *Locational Uncertainty Type* is **Estimated**, **Delimited** or **Linear**.....2
    2. Source Feature is 1 hectare (ca. 2.5 acres) or less.....RA is **High**
    2. Source Feature is larger than 1 hectare.....3
        3. *Conceptual Feature Type* is **Point**.....4
            4. Source Feature is 50 hectares (ca. 125 acres) or less.....RA is **Medium**
            4. Source Feature is larger than 50 hectares.....5
                5. Source Feature is 2500 hectares (ca. 6178 acres) or less.....RA is **Low**
                5. Source Feature is larger than 2500 hectares.....RA is **Very Low**
        3. *Conceptual Feature Type* is **Line** or **Polygon**.....6
            6. More than 80% of the Source Feature is comprised of the observed area (i.e., 20% or more of the Source Feature is comprised of area added for locational uncertainty) or the Source Feature is 1 hectare or less.....RA is **High**
            6. 80% or less of the Source Feature is comprised of the observed area (i.e., 20% or more of the Source Feature is comprised of area added for locational uncertainty) or the observed area is unknown (Source Feature greater than 1 hectare).....7
                7. 20% or more of the Source Feature is comprised of the observed area (i.e., less than 80% of the Source Feature is comprised of area added for locational uncertainty).....RA is **Medium**
                7. Less than 20% of the Source Feature is comprised of the observed area (i.e., 80% or more of the Source Feature is comprised of area added for locational uncertainty) or the observed area is unknown.....8
                    8. Source Feature is 50 hectares (ca. 125 acres) or less.....RA is **Medium**
                    8. Source Feature is larger than 50 hectares.....9
                        9. Source Feature is 2500 hectares (ca. 6178 acres) or less .....RA is **Low**
                        9. Source Feature is larger than 2500 hectares.....RA is **Very low**

WORKSHEET
Mapping EO Reps Using Biotics

This exercise helps to walk you through the steps for developing EOs based on minimal data. We will be demonstrating the mapping of these EOs using Biotics.

Instructions:

Specify

a) Assumptions/decisions made in interpreting the data, if any
b) Observed Feature Type
c) Conceptual Feature Type
d) Locational Uncertainty Type
   · provide an Uncertainty Distance or Class, if appropriate
e) Source Feature Type
   · include whether any existing feature on the map would be used in creating the Source Feature
f) Name of buffer (uncertainty or procedural) to be applied in generating the Basic Feature or Procedural Feature, if applicable
g) Representation Accuracy

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1. **Data:** Literature research has uncovered the observation of a Blanding's Turtle (*Emydoidea blandingii)* on Strawberry Island on March 26th, 1979 by Joseph Keller.

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer: ☐ None ☐ Procedural ☐ Uncertainty _____(distance)			
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			

2. **Data:** An herbarium record reflects a specimen of False Rue-anemone (***Enemion biternatum***) collected on Strawberry Island on August 13th, 1964 by D.F. Day.

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer: ☐ None ☐ Procedural ☐ Uncertainty _____(distance)			
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			

3. **Data:** A spiny softshell turtle was observed at Lat: 42.6207 Long: -77.0912. Coordinates were recorded with a GPS with precision of 21 feet.

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer: ☐ None ☐ Procedural ☐ Uncertainty _____(distance)			
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			

4. **Data:** An existing EO (EO ID 14092) for Upland Sandpiper, *Bartramia longicauda,* needs to be updated to remove the unsuitable habitat (Lake Ontario). Because an EO is based on its Source Features, the Source Feature needs to be modified, which will in turn result in the modification of the EO. The current Conceptual Feature Type is Point with Locational Uncertainty Type of Estimated.

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer: ☐ None ☐ Procedural ☐ Uncertainty _____(distance)			
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			

5. **Data:** *Eleocharis ovata (*Ovate Spikerush) was observed within 50 feet of the shoreline of Whaley Lake.

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer: ☐ None ☐ Procedural ☐ Uncertainty _____(distance)			
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			

6. **Data:** In going through a backlog of data, an old observation of Horned Grebe (Podiceps auritus) is uncovered at the very northern tip (the little part jutting out) of Blueberry Lake. The observation was made on September 8th, 1993 by George Jetson. Because no coordinates or precision were provided but the location is fairly specific, you use your program's default precision of 200 m, for such cases. There was no evidence of breeding.

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type:	☐ Negligible	☐ Linear	☐ Estimated ☐ Delimited
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer: ☐ None	☐ Procedural	☐ Uncertainty _____(distance)	
Representation Accuracy:	☐ Very High	☐ High	☐ Medium ☐ Low ☐ Very Low

7. **Data:** ovenbird (*Seiurus aurocapilla*) nest located in Dutchess county, Poughquag quad, using a GPS with 12 m accuracy; latitude 41.5675 longitude -73.700

Assumptions/interpretive decisions:

_____

_____

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type:	☐ Negligible	☐ Linear	☐ Estimated ☐ Delimited
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer:	☐ Procedural	☐ Uncertainty _____(distance)	
Representation Accuracy:	☐ Very High	☐ High	☐ Medium ☐ Low ☐ Very Low

8. **Data:** eastern pondmussel (*Ligumia nasuta*) historical specimen collected in Ludington Lake in 1929

   Assumptions/interpretive decisions:

   _____

   _____

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer:	☐ Procedural	☐ Uncertainty _____(distance)	
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			

9. **Data**: You're QCing data and find that the Spiny Softshell which is mapped in Little Whaley Lake was actually observed in Whaley Lake. Modify the shape of the Source Feature to move it to Whaley Lake. (If someone beat you to it, move it from Whaley Lake to Little Whaley Lake!)

10. **Data:** black spruce-tamarack bog (*Picea mariana-Larix laricina / Ledum groenlandicum / Sphagnum* spp. Forest) located ENE of Ludington Lake, on the west side of Depot Hill Road across from the intersection of Rt. 931 Grape Hollow Road

    Assumptions/interpretive decisions:

    _____

    _____

Observed Feature Type:	☐ Small area	☐ Linear area	☐ Large area
Conceptual Feature Type:	☐ Point	☐ Line	☐ Polygon
Locational Uncertainty Type: ☐ Negligible ☐ Linear ☐ Estimated ☐ Delimited			
Source Feature Type:	☐ Point	☐ Line	☐ Polygon
Buffer:	☐ Procedural	☐ Uncertainty _____(distance)	
Representation Accuracy: ☐ Very High ☐ High ☐ Medium ☐ Low ☐ Very Low			