



## SEMINOLE COUNTY MAIN MENU



|                   |                    |
|-------------------|--------------------|
| Macroinvertebrate | Library            |
| LVI               | Reports            |
| LMS               | View Summary Table |
| ALGAE             | Reference Tables   |
| LVS               | Export Bug Data    |
| RPS               |                    |




## SEMINOLE COUNTY MACROINVERTEBRATE MENU




|                      |                    |
|----------------------|--------------------|
| Enter Sample - Field | Edit Sample - Taxa |
| Edit Sample - Field  | Approve Sample     |
| Enter Sample - Taxa  | Edit/View Sample   |

Seminole County Main Menu   Macro Invertebrate Menu   **Enter Sample - Field Data**



## ENTER SAMPLE - Field Data



Sample Date:   
 Program:   
 Location:   
 Sample ID:   
 Sampling Method:

Field Tech (1):  (2):  **Add Sample**  **Uncollected**

Field Tech (3):  (4):   
 No Of Grabs/Sweeps:


**Field Parameters**

Field Chemical  
  Stream Physical  
  Stream Habitat  
  None  
 Lake Physical  
  Lake Habitat


| Parameter Name       | Value                |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |

Record: 1 of 1   No Filter   Search

Seminole County Main Menu   Macro Invertebrate Menu   **Enter Sample - Taxa Data**



## ENTER SAMPLE - Bug Data



Sample ID:   
 Sample Date:   
 Program:   
 Location:   
 Sampling Method:

Taxonomist Tech (1):  (2):  **View Taxa Entry**

Sort Tech (1):  (2):  **Add Sample**

Mount Tech (1):  (2):  **Add New Taxa**

No Of Alliquot:  Out of  **Bug Library**

Genus Species:  **Refresh**

Tally:  Abun Code:

Taxa Added:  **Add Taxon**



## SEMINOLE COUNTY LVI Menu



- Enter Sample
- Edit Entered Sample
- Approve Sample
- Edit/View Approved Sample

## VIEW SAMPLE - LVI Data



Quick Find Sample ID:

[Print Report](#)

**Sample ID:**       **Secchi:**   
**Water Body:**       **Total Depth:**   
**Sample Date:**       **QA User:**   
**Sampling Team:**       **QA Date:**

**Lake Units Sampled**

Species Name      C of C                              [Add Plant](#)

| Species Name                | C of C | 1 | 4 | 7 | 10 |
|-----------------------------|--------|---|---|---|----|
| Acer rubrum                 | 4.65   | P |   |   |    |
| Alternanthera philoxeroides | 0      | P | P | P |    |
| Aster carolinianus          | 3.93   |   | P |   |    |
| Bacopa monnieri             | 3.5    |   |   | P |    |
| Bidens alba                 | 1      |   | P |   |    |
| Bidens mitis                | 4.5    |   | P |   |    |
| Cabomba caroliniana         | 5.5    |   |   | P |    |
| Canna                       |        |   | P | P |    |
| Cephalanthus occidentalis   | 5      | P |   | P | P  |
| Ceratophyllum demersum      | 4.16   |   | D |   | P  |
| Chara                       | 3.9    |   |   | P | P  |



# SEMINOLE COUNTY LIBRARY MENU



|                   |                     |
|-------------------|---------------------|
| Enter Bug Library | Enter Plant Library |
| View Bug Library  | View Plant Library  |
| Edit Bug Library  | Edit Plant Library  |



# VIEW BUG LIBRARY Genus Species Data



Quick Find Taxa:

Active  Inactive  All

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z All

|                                   |                                      |            |
|-----------------------------------|--------------------------------------|------------|
| Phylum: ARTHROPODA                | County Level Code: Species           | No: 1      |
| Class: HEXAPODA                   | Verify Status: Verified              |            |
| Order: DIPTERA                    | Verification Date: 6/29/2007         |            |
| Family: CHIRONOMIDAE              | Verification Source: WAR             |            |
| Sub Family: TANYPODINAE           | Life Cycle: N/A                      |            |
| Genus: Ablabesmyia                | Sensitivity Level: N/A               |            |
| Species: annulata                 | Habit: Sprawler                      |            |
| Taxa: Ablabesmyia annulata        | DEP Level Code: Species              |            |
| Report Taxa: Ablabesmyia annulata | Taxa Info/Grid Location: [D1,B#7,25] |            |
| BI: 5                             | Comments/Location Code: BUC-LCI-76   |            |
| Fgrp: Predator                    |                                      |            |
| HI: A                             | Active/Inactive: A                   |            |
| Collapse: No                      |                                      |            |
| Created By:                       |                                      |            |
| Modify By: marianne               | 9/22/2008                            | 4:42:15 PM |

## Bug Library - Taxa List

| Phylum   | Class       | Order           | Family          | Sub Family | Genus Species           | BI | Egrp     | HI  | Taxa Info                                            | AI |
|----------|-------------|-----------------|-----------------|------------|-------------------------|----|----------|-----|------------------------------------------------------|----|
| ANNELIDA | HIRUDINEA   | ARHYNCHOBELLIDA | ERPOBDELLIDAE   | Z/A        | Erpobdella punctata     | 5  | Predator | N/A | [D1, B# 2, B-8]                                      | A  |
| ANNELIDA | HIRUDINEA   | ARHYNCHOBELLIDA | ERPOBDELLIDAE   | Z/A        | Erpobdella sp.          | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | ARHYNCHOBELLIDA | ERPOBDELLIDAE   | Z/A        | Erpobdella tetragon     | 5  | Predator | N/A | [D1, B#1, 1-1]                                       | A  |
| ANNELIDA | HIRUDINEA   | ARHYNCHOBELLIDA | ERPOBDELLIDAE   | Z/A        | FAMILY: ERPOBDELLIDAE   | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | ARHYNCHOBELLIDA | ERPOBDELLIDAE   | Z/A        | Mooreobdella tetragon   | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | ARHYNCHOBELLIDA | HAEMOPIDAE      | Z/A        | FAMILY: HAEMOPIDAE      | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Batrachobdella phalera  | 5  | Predator | N/A |                                                      | I  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Batrachobdella sp.      | 5  | Predator | N/A |                                                      | I  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Desserobdella phalera   | 5  | Predator | N/A | [D1, B#1, G-2 & B#2, B-8]                            | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | FAMILY: GLOSSIPHONIIDAE | 5  | Predator | N/A | [D1, B#2, B-5]                                       | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Gloibdella elongata     | 5  | Predator | N/A | [D1, B#2, B-7 and B-8]                               | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Helobdella elongata     | 5  | Predator | N/A |                                                      | I  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Helobdella fusca        | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Helobdella sp.          | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Helobdella stagnalis    | 5  | Predator | N/A | [D1, B#1, G-3 and G-4] [D1, B#2, B-4] [D1, B#1, 1-5] | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Helobdella triserialis  | 5  | Predator | N/A | [D1, B#1, 1-1]                                       | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Placobdella hollensis   | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Placobdella papillifera | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Placobdella parasitica  | 5  | Predator | N/A | [D1, B#2, B-3]                                       | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Placobdella sp.         | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | GLOSSIPHONIIDAE | Z/A        | Placobdella translucens | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | HIRUDINIDAE     | Z/A        | Macrobodella ditetra    | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | HIRUDINEA   | RHYNCHOBELLIDA  | PISCICOLIDAE    | Z/A        | Myzobdella lugubris     | 5  | Predator | N/A | [D-1, B#2, B-2]                                      | A  |
| ANNELIDA | HIRUDINEA   | Z/A             | Z/A             | Z/A        | CLASS: HIRUDINEA        | 5  | Predator | N/A |                                                      | A  |
| ANNELIDA | OLIGOCHAETA | HAPLOTAXIDA     | NAIDIDAE        | Z/A        | Allonais paraguayensis  | 3  | Gatherer | N/A |                                                      | A  |
| ANNELIDA | OLIGOCHAETA | HAPLOTAXIDA     | NAIDIDAE        | Z/A        | Allonais pectinata      | 3  | Gatherer | N/A |                                                      | A  |
| ANNELIDA | OLIGOCHAETA | HAPLOTAXIDA     | NAIDIDAE        | Z/A        | Allonais sp.            | 3  | Gatherer | N/A |                                                      | A  |
| ANNELIDA | OLIGOCHAETA | HAPLOTAXIDA     | NAIDIDAE        | Z/A        | Arctonais lomondi       | 3  | Gatherer | N/A |                                                      | A  |
| ANNELIDA | OLIGOCHAETA | HAPLOTAXIDA     | NAIDIDAE        | Z/A        | Bratslavia unidentata   | 3  | Gatherer | N/A | [D1, B#6, 40]                                        | A  |
| ANNELIDA | OLIGOCHAETA | HAPLOTAXIDA     | NAIDIDAE        | Z/A        | Chaetogaster diaphanus  | 3  | Gatherer | N/A |                                                      | A  |

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## Macroinvertebrate BioRecon Bench Sheet - Collapsed

**Program:** Biorecon  
**Location:** Big E on River  
**Sample Date:** 3/28/2012  
**Sampling Method:** D-frame Net - BIORECON

**Sample ID:** BECO-Biorecon-51  
**Date Analysis Complete:**  
**No of Sweeps:** 4  
**Method Reference:** FDEP Field SOPs 7000, LT7000

**(1) (2)**  
**Sort Tech:** MP MJS  
**Taxonomist:** MP  
**Metric:** Exceptional

| Phylum     | Class       | Order         | Family          | Sub Family | Genus Species                   | BI | Tally | Abun |
|------------|-------------|---------------|-----------------|------------|---------------------------------|----|-------|------|
| ANNELIDA   | OLIGOCHAETA | Z/A           | Z/A             | Z/A        | CLASS: OLIGOCHAETA              | 3  | 3     | R    |
| ARTHROPODA | ARACHNIDA   | ACARIFORMES   | Z/A             | Z/A        | ORDER: ACARIFORMES              | 5  | 4     | C    |
| ARTHROPODA | CRUSTACEA   | AMPHIPODA     | GAMMARIDAE      | Z/A        | Gammarus s p.                   | 2  | 25    | A    |
| ARTHROPODA | CRUSTACEA   | DECAPODA      | ASTACIDAE       | Z/A        | Procambarus sp.                 | 5  | 1     | R    |
| ARTHROPODA | CRUSTACEA   | DECAPODA      | PALAEONIDAE     | Z/A        | Palaemonetes paludosus          | 2  | 2     | R    |
| ARTHROPODA | HEXAPODA    | COLEOPTERA    | ELMIDAE         | Z/A        | Dubiraphia vittata              | 4  | 7     | C    |
| ARTHROPODA | HEXAPODA    | COLEOPTERA    | ELMIDAE         | Z/A        | Stenelmis sp.                   | 4  | 12    | A    |
| ARTHROPODA | HEXAPODA    | COLEOPTERA    | GYRINIDAE       | Z/A        | Dineutus sp.                    | 4  | 2     | R    |
| ARTHROPODA | HEXAPODA    | COLEOPTERA    | HYDROPHILIDAE   | Z/A        | Berosus sp.                     | 4  | 1     | R    |
| ARTHROPODA | HEXAPODA    | DIPTERA       | CERATOPOGONIDAE | Z/A        | FAMILY: CERATOPOGONIDAE         | 3  | 3     | R    |
| ARTHROPODA | HEXAPODA    | DIPTERA       | CHIRONOMIDAE    | Z/A        | FAMILY: CHIRONOMIDAE            | 5  | 32    | A    |
| ARTHROPODA | HEXAPODA    | EPHEMEROPTERA | BAETIDAE        | Z/A        | Baetis intercalaris             | 5  | 1     | R    |
| ARTHROPODA | HEXAPODA    | EPHEMEROPTERA | CAENIDAE        | Z/A        | Caenis diminuta                 | 3  | 8     | C    |
| ARTHROPODA | HEXAPODA    | EPHEMEROPTERA | HEPTAGENIIDAE   | Z/A        | Moccafferium exiguum            | 1  | 8     | C    |
| ARTHROPODA | HEXAPODA    | EPHEMEROPTERA | HEPTAGENIIDAE   | Z/A        | Moccafferium mexicanum integrum | 1  | 8     | C    |
| ARTHROPODA | HEXAPODA    | HEMIPTERA     | CORIXIDAE       | Z/A        | Trichocorixa sp.                | 4  | 2     | C    |
| ARTHROPODA | HEXAPODA    | HEMIPTERA     | NAUCORIDAE      | Z/A        | Pelocoris sp.                   | 4  | 1     | R    |
| ARTHROPODA | HEXAPODA    | MEGALOPTERA   | CORYDALIDAE     | Z/A        | Chauliodes r astricornis        | 5  | 1     | R    |
| ARTHROPODA | HEXAPODA    | ODONATA       | CALOPTERYGIDAE  | Z/A        | Hetaerina titia                 | 1  | 5     | C    |
| ARTHROPODA | HEXAPODA    | ODONATA       | COENAGRIONIDAE  | Z/A        | Argia sedula                    | 1  | 7     | C    |
| ARTHROPODA | HEXAPODA    | ODONATA       | COENAGRIONIDAE  | Z/A        | Argia tibialis                  | 1  | 1     | R    |
| ARTHROPODA | HEXAPODA    | ODONATA       | COENAGRIONIDAE  | Z/A        | Enallagma s p.                  | 5  | 9     | C    |
| ARTHROPODA | HEXAPODA    | TRICHOPTERA   | HYDROPSYCHIDAE  | Z/A        | Cheumatopsyche sp.              | 2  | 23    | A    |
| ARTHROPODA | HEXAPODA    | TRICHOPTERA   | HYDROPTILIDAE   | Z/A        | Neotrichia sp.                  | 5  | 4     | C    |
| ARTHROPODA | HEXAPODA    | TRICHOPTERA   | HYDROPTILIDAE   | Z/A        | Orthotrichia sp.                | 5  | 8     | C    |
| ARTHROPODA | HEXAPODA    | TRICHOPTERA   | LEPTOCERIDAE    | Z/A        | Nectopsyche exquisita           | 2  | 1     | R    |
| ARTHROPODA | HEXAPODA    | TRICHOPTERA   | LEPTOCERIDAE    | Z/A        | Oeetis persimilis               | 2  | 5     | C    |

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## Macroinvertebrate BioRecon Analysis Summary - Collapsed

Program: Biorecon      Sample ID: BECO-Biorecon-51      Total Species: 34  
 Location: Big Eon River      Date Analysis Complete:      Total # Individuals: 213  
 Sample Date: 3/28/2012      No of Sweeps: 4      Metric: Exceptional  
 Sampling Method: DframeNet-BIORECON      Method Reference: FDEP Field SOPs 7000, LT7000      E/P/T Ratio: 41.3%

### Biotic Index Summary

|                                   |                                       |
|-----------------------------------|---------------------------------------|
| Class 1 # of Species: 6    17.6%  | Class 1 # of Individuals: 34    16.0% |
| Class 2 # of Species: 5    14.7%  | Class 2 # of Individuals: 56    26.3% |
| Class 3 # of Species: 4    11.8%  | Class 3 # of Individuals: 16    7.5%  |
| Class 4 # of Species: 6    17.6%  | Class 4 # of Individuals: 25    11.7% |
| Class 5 # of Species: 13    38.2% | Class 5 # of Individuals: 82    38.5% |

### Taxa Summary

|                              |                                  |                                     |
|------------------------------|----------------------------------|-------------------------------------|
| Class OLIGOCHETA: 3    1.4%  | Order Z/A: 3    1.4%             | Family GYRINIDAE: 2    0.9%         |
| Class HEXAPODA: 171    80.3% | Order VENEROIDA: 4    1.9%       | Family ASTACIDAE: 1    0.5%         |
| Class GASTROPODA: 3    1.4%  | Order TRICHOPTERA: 65    30.5%   | Family BAETIDAE: 1    0.5%          |
| Class CRUSTACEA: 28    13.1% | Order ODONATA: 22    10.3%       | Family CAENIDAE: 8    3.8%          |
| Class BIVALVIA: 4    1.9%    | Order MEGALOPTERA: 1    0.5%     | Family CALOPTERYGIDAE: 5    2.3%    |
| Class ARACHNIDA: 4    1.9%   | Order HEMiptERA: 3    1.4%       | Family CERATOPOGONIDAE: 3    1.4%   |
|                              | Order EPHEMEROPTERA: 23    10.8% | Family CHIRONOMIDAE: 32    15.0%    |
|                              | Order DIPTERA: 35    16.4%       | Family COENAGRIONIDAE: 17    8.0%   |
|                              | Order DECAPODA: 3    1.4%        | Family CORBICULIDAE: 4    1.9%      |
|                              | Order COLEOPTERA: 22    10.3%    | Family CORODIDAE: 2    0.9%         |
|                              | Order BASIDIMORPHORA: 3    1.4%  | Family CORYDALIDAE: 1    0.5%       |
|                              | Order AMPHIPODA: 25    11.7%     | Family ANCYLIDAE: 1    0.5%         |
|                              | Order ACARIFORMES: 4    1.9%     | Family GAMMARIDAE: 25    11.7%      |
|                              |                                  | Family Z/A: 7    3.3%               |
|                              |                                  | Family HEPTAGENIDAE: 14    6.6%     |
|                              |                                  | Family HYDROPHILIDAE: 1    0.5%     |
|                              |                                  | Family HYDROPSYCHIDAE: 23    10.8%  |
|                              |                                  | Family HYDROPTILIDAE: 10    4.7%    |
|                              |                                  | Family LEPTOCERIDAE: 16    7.5%     |
|                              |                                  | Family NAUCORIDAE: 1    0.5%        |
|                              |                                  | Family PALAEMONIDAE: 2    0.9%      |
|                              |                                  | Family PHILOPOTAMIDAE: 7    3.3%    |
|                              |                                  | Family PHYSIDAE: 2    0.9%          |
|                              |                                  | Family POLYCENTROPODIDAE: 9    4.2% |
|                              |                                  | Family ELMIDAE: 19    8.9%          |

| Functional Feeding Groups | Sensitivity Level        | Life Cycle            | Habit                 |
|---------------------------|--------------------------|-----------------------|-----------------------|
| Shredder: 11    5.2%      | Very Tolerant: 9    4.2% | N/A: 205    96.2%     | Swimmers: 16    7.5%  |
| Scrapers: 21    9.9%      | Sensitive: 23    10.8%   | Long-Lived: 8    3.8% | Sprawlers: 13    6.1% |
| Predators: 40    18.8%    | N/A: 181    85.0%        |                       | N/A: 92    43.2%      |
| Piercers: 7    3.3%       |                          |                       | Clingers: 59    27.7% |
| Gatherers: 91    42.7%    |                          |                       | Climbers: 32    15.0% |
| Filterers: 43    20.2%    |                          |                       | Burrowers: 1    0.5%  |

\* Standard Caco only valid for MED and FDEP Standard Methods.  
5/14/2014

## Macroinvertebrate SCI Composite Sheet - Collapsed

|                                                |                                   |                 |     |
|------------------------------------------------|-----------------------------------|-----------------|-----|
| Program: SCI                                   | Sample ID: SMIN (SCI2)-SCI-15     | (1)             | (2) |
| Location: Smith Canal                          | Date Analysis Complete:           | Sort Tech: MP   | MJS |
| Sample Date: 4/10/2012                         | No of Allocated Used: 1 out of 24 | Mount Tech: MJS |     |
| Sampling Method: DframeNet-SCI                 | % of Sample Worked: 1.6           | Taxonomist: MP  |     |
| Method Reference: FDEP Field SOPs 7000, LT7000 | No of Sweeps: 20                  |                 |     |

|                                                |                                   |                 |     |
|------------------------------------------------|-----------------------------------|-----------------|-----|
| Program: SCI                                   | Sample ID: SMIN-SCI-14            | (1)             | (2) |
| Location: Smith Canal                          | Date Analysis Complete:           | Sort Tech: MP   | MJS |
| Sample Date: 4/10/2012                         | No of Allocated Used: 2 out of 24 | Mount Tech: MJS |     |
| Sampling Method: DframeNet-SCI                 | % of Sample Worked: 2             | Taxonomist: MP  |     |
| Method Reference: FDEP Field SOPs 7000, LT7000 | No of Sweeps: 20                  |                 |     |

|                               |                      |
|-------------------------------|----------------------|
| Sample ID: SMIN (SCI2)-SCI-15 |                      |
| SCI Score                     | 76.44    Exceptional |
| Sample ID: SMIN-SCI-14        |                      |
| SCI Score                     | 66.25    Exceptional |

|                                 |
|---------------------------------|
| AVERAGE SCORE: 71 - Exceptional |
|---------------------------------|