TIEE Issues - Figure Set Submission Form

SUBMISSION INSTRUCTIONS

Complete each section of this submission form. Send the completed Word file as an email attachment to [christopher.beck@emory.edu](mailto:christopher.beck@emory.edu).

*Before you begin:*Please review the [Four Dimensional Ecology Education (4DEE) Framework](https://www.esa.org/4DEE/framework/) and the [submission guidelines](https://tiee.esa.org/misc/submit.html), which illustrate how to incorporate 4DEE in your module. While your module might not include all four dimensions, pay particular attention to *Core Ecological Concepts* and *Ecology Practices*, especially data interpretation, that should be common to all Figure Sets. We recommend that authors to include at least one other dimension of the 4DEE framework. Your module should encourage students to think across multiple 4DEE dimensions in the interpretation of figures. Dimensions that are not included can be deleted from the Figure Set Homepage template below.

*Note on images:*  Be sure to secure permission from copyright holder prior to submitting to TIEE. Without copyright permission, we cannot publish the figure set.

SUBMISSION FORMAT

**Figure Set Homepage**

* **Title:**
* **Author(s):**
* **Institution(s):**
* **The Issue:** <Include a brief statement of the ecological problem that students are considering in the figure set. If at all possible, provide a setting that will help students connect across dimensions, especially to Cross-Cutting Themes or Human-Environment Interactions.**>**
* **Four Dimensional Ecology Education (4DEE) Framework**
  + **Core Ecological Concepts**: <include the elements or sub-elements that are considered in the figure set. See <https://www.esa.org/4dee/framework/#core-ecological>. Note that the list of element and sub-elements in the 4DEE framework is not exhaustive. Authors are encouraged to add additional elements or sub-elements as necessary.>
  + **Ecology Practices:** < include the elements or sub-elements that are considered in the figure set. See <https://www.esa.org/4dee/framework/#ecology-practices>. Note that the list of element and sub-elements in the 4DEE framework is not exhaustive. Authors are encouraged to add additional elements or sub-elements as necessary.>
  + **Human-Environment Interactions:** < include the elements or sub-elements that are considered in the figure set. See <https://www.esa.org/4dee/framework/#human-environment>. Note that the list of element and sub-elements in the 4DEE framework is not exhaustive. Authors are encouraged to add additional elements or sub-elements as necessary.>
  + **Cross-cutting Themes:** < include the elements or sub-elements that are considered in the figure set. See <https://www.esa.org/4dee/framework/#cross-cutting>. Note that the list of element and sub-elements in the 4DEE framework is not exhaustive. Authors are encouraged to add additional elements or sub-elements as necessary.>
* **Student-active Approaches:** <list the approaches used in each of the figure sets, e.g. jigsaw, nearest neighbor, etc.>
* **Student Assessments:** <list the suggested assessments from the Teaching Evaluation section, e.g., essay, quiz, etc.>
* **Class Time:** <Class time required for completing the figure set>
* **Course Context:** <State a few details to indicate the type of course in which you use this experiment, e.g. level (Fr, So, Jr, Sr, Gr), major/non-major, GenEd, etc.>
* **Acknowledgements:** <origin of the concept for this issue, who was inspirational, whose creative activities led to your developing this activity, what funding sources supported its development, who deserves mention in helping you to get this together, and what role did they play. Be sure to cite as appropriate. >
* **Relevant Cover Image:** <include an image which complements or in some way helps to illustrate the submission; send as separate image file>

**Manuscript**

**Overview: What Is the Ecological Issue?**   
Describe the Issue in more detail, perhaps 300-500 words; include core references. This section is intended to introduce instructors to the ecological issue addressed in the figure set.

**Figure Sets Table**

For each set of figures, complete a row in the following table

|  |  |  |
| --- | --- | --- |
| **Figure Set** | **Student-active Approach** | **Cognitive Skill** |
| Brief title of the figure set | A suggested approach appropriate for the cognitive skill, time, and class size | One or more of Bloom's taxonomic skills (e.g. knowledge, comprehension, interpretation, analysis, application, synthesis |
|  |  |  |
|  |  |  |
|  |  |  |

**Figure Set Details** (Copy format and repeat for each Figure set)

* **Learning Objectives:** <Specific student learning objectives for Figure Set. For more information on writing learning objectives and incorporation of 4DEE into learning objectives, see <https://www.learngala.com/cases/ocelots-author-guidelines-toolkits/4> >
* **Student Assessment:** <Suggested approaches for assessing student learning objectives>

**Figure Set Background:** <Brief background information about the figure set(s) and paper(s) written for faculty>

**Figures**

* **Figure** <Be sure to secure permission from copyright holder prior to submitting to TIEE>
* **Fig. Legend** <Figure or table legend written for students>

**Student Instructions:** <Instructions for students that faculty can hand out. For instance, background information so that students can understand the figure or table without reading the paper and specific instructions about what students should do. Questions that students address through interpretation of the figures should encourage integration across 4DEE dimensions.>

**Notes to Faculty: <**For faculty only. This section should include information about how faculty can use the figure set in their teaching, anticipate student responses or misunderstandings, offer suggestions for discussion questions, and provide methods to measure student understanding. If specific questions are included in the Figure Set, include the questions along with suggested answers.

Style should be "chatty”; length can vary.

**Additional** **Resources** <Optional. Any additional resources that might be helpful for faculty or students in understanding the Figure Set>

**Literature Cited** <Literature cited for the entire manuscript. Use Chicago Style Manual “AUTHOR-DATE” citation style, the current style of ESA Journals.>