Naturalist Outreach  
Lesson Plan  
Matthew Kiszla  
Grades: 6-12  
Date: 21Feb19  
Unit/Topic/Lessons: Biocontrol

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<th>Objectives</th>
<th>Correlation to State &amp; National Documents</th>
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| Student will be able to: Identify the general mechanism of biocontrol, identify common biocontrol agents, and utilize biocontrol at home. | **Alabama Course of Study: Science**  
9-12 Unity and Diversity :14  
**AHSGE/Exit Standards & Eligible Content:**  
National Science Standards:  
9-12 Life Science: Behavior of organisms  
Assessment: PowerPoint Presentation |

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| 8. Construct an explanation to predict patterns of interactions in different ecosystems in terms of the relationships between and among organisms (e.g., competition, predation, mutualism, commensalism, parasitism). | x Hands-On Materials  
Multimedia Materials  
Computers/notebooks/PDA  
Web sites  
Software  
Overhead Masters  
Workbook/Handouts  
x Other Equipment/Supplies | Homework  
Test/Quiz  
Project  
Participation  
Class work  
Presentation  
Oral Responses  
Teacher Observation  
Self Evaluation  
Group Evaluation  
Portfolio  
Other (Journal Entry) |

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<th>Grouping Strategies (small group, pairs)</th>
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<td>Have paper, termites, various writing utensils (including blue bic pens), and paint brush for termite wrangling.</td>
<td>Demonstrate to students the effect of the blue bic pen on the termites. Ask students to attempt to replicate this effect with all of their drawing utensils and then ask for the theory behind the effect. Tie the use of pheromones, the cause of the effect, to biocontrol.</td>
<td>Work in groups of 2-3 students to conserve materials and encourage teamwork.</td>
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| **Class work:** Termite Project | Teacher should have knowledge of basic ecology.  
**Guided practice:** Guide students through testing pens | Integration with other disciplines: Writing (W.9-10.2), chemistry  
Remediation Activities: |
| **Reading:** Text/ Articles/ Other Papers on biocontrol examples | - Bug Lady Consulting, a biocontrol firm.  
http://www.bugladyconsulting.com/Publications.htm  
- New York State Integrated Pest Management.  
https://nysipm.cornell.edu/environment/biocontrol/biocontrol-resources/ | Enrichment Activities/Extensions:  
Develop a presentation on biocontrol. |
| **Writing:** Prepare a PowerPoint | **Homework:** Presentation on an example of biocontrol that students would be able to implement around the house. | **Special Topics/Schedules**  
Testing: Activity: Assembly:  
Pep Rally: Media/PR: SAC:  
Career Education: Character Ed:  
Adopt-A-School: Athletics: |
| **Technology Integration:** PowerPoint: Students will develop PowerPoints on relevant biocontrol examples. | Websites: |  
**Total Duration:** Lesson from 20 to 40 minutes; presentations can be developed over future class periods. |