Activity #2 Coastal Unit 4



Activity #2 Red Imported Fire Ant Prevention & Quick Response Plan

- • In Advance Research Preparation and Student Reading
- Student research may go more quickly if you look through the "Research Resources" listing in the Student Page "RIFA Prevention and Quick Response Plan" (p. 31-33). Place an interlibrary loan order for some of the books and journal articles listed there, and put them on reserve in your school library or make them available in your classroom.
- Assign the Student Page "Endangered Water Birds Threatened by ... Ants?!?" (pp. 27-30)

• • • Class Period One Team Research Projects

Materials & Setup

Available in the classroom or on reserve in the library

• One or more copies of the "Resource Packet on Red Imported Fire Ants" (included as an appendix to this unit)

For each student

- Student Page "Endangered Water Birds Threatened by . . . Ants?!?" (pp. 27-30)
- Student Page "RIFA Prevention and Quick Response Plan" (pp. 31-33)

Instructions _

- 1) Divide the class into teams of four to eight students. Hand out the Student Page "RIFA Prevention and Quick Response Plan." Each team will be responsible for developing a plan for the island of Maui. The plan's purpose is to prevent the red imported fire ant *(Solenopsis invicta)* from becoming established on Maui as well as to respond rapidly to control the ants' spread if it is discovered on the island. Students will be researching and developing their plans during this class period, on their own time, and during the second class period.
- 2) To jump-start students' thinking, start the class off by reviewing the main points from the reading. Before the teams start their work, brainstorm a list of ideas with the whole class.

One question to brainstorm about is: "Where is the red imported fire ant most likely to be introduced to Maui?" Brainstorming places where entry is likely will help students thing about how to target prevention and monitoring efforts.



Research may be done on the Internet, in local college libraries, and through interlibrary loan. See also the "Resource Packet" included as an appendix to this unit, which consists of pages downloaded from various Internet sites listed in the Student Page "RIFA Prevention and Quick Response Plan." Students may want to check the webpages themselves for updated information.

Each team will produce an outline and rationale for its plan. Use the Student Page "RIFA Prevention and Quick Response Plan" as a guide. As the group works together, each student should take responsibility for doing a particular aspect of the research so that the work—and the learn-ing—gets spread around. Use the four elements of the plan listed on the student page (p. 31) to divide responsibility. For groups of more than four students, have pairs of students work together.

Note __

Allow several days between class periods one and two to allow teams time to work on their research and plans.

• • • Class Period Two Research Team Meetings

1) Allow student research teams to meet to finalize their plans and to prepare for their in-class presentations.

• • • Class Period Three Team Presentations

1) Student teams make five- to ten-minute presentations of their plans to the class.

Journal Ideas_____

- How can you help spread the word about the threat of fire ants? What do other people need to know?
- How big of a threat do you think red imported fire ants are to Maui native ecosystems, including wetlands? Explain your reasoning.

Assessment Tools _____

- Prevention and Quick Response Plans (see the Student Page "RIFA Prevention and Quick Response Plan" for a list of elements that will help you evaluate the plans)
- Team presentations