Science Time

Program Content for December 14, 2016

Read the article "In Texas, crazy ants are the new fire ants (and possibly worse)" on page A14 of the Friday, December 9, 2016 edition of The Seattle Times.

Objective

 I can explain how crazy ants are negatively impacting parts of Texas and detail how they have spread.

Next Generation Science Standards (NGSS) connection

Disciplinary Core Ideas - Ecosystem Dynamics, Functioning, and Resilience

- A complex set of interactions within an ecosystem can keep its numbers and types of organisms
 relatively constant over long periods of time under stable conditions. If a modest biological or
 physical disturbance to an ecosystem occurs, it may return to its more or less original status (i.e.,
 the ecosystem is resilient), as opposed to becoming a very different ecosystem. Extreme
 fluctuations in conditions or the size of any population, however, can challenge the functioning of
 ecosystems in terms of resources and habitat availability.
- Moreover, anthropogenic changes (induced by human activity) in the environment—including habitat destruction, pollution, introduction of invasive species, overexploitation, and climate change—can disrupt an ecosystem and threaten the survival of some species.

<u>Pre-reading and Vocabulary</u>: Define each term and then use it in a sentence to demonstrate your understanding.

- 1. pestilence
- 2. ecosystem
- 3. neutralize
- 4. pheromone
- 5. invasive

Comprehension Questions

- 1. What ant has replaced the fire ant a top the list of pests that Texas needs to get under control?
- 2. List at least 4 destructive habits of these ants.
- 3. What point was made in the article from a jar full of crazy ants?
- 4. How many gallons of ants were found in an exterminator's air conditioner?
- 5. How many different counties in Texas have crazy ants?
- 6. What is most responsible for the large spread of crazy ants?
- 7. Why were fire ants able to spread so quickly in the South once they arrived in the United States?
- 8. How were crazy ants able to displace fire ants in Texas?
- 9. What do crazy ants do when they are hurt?
- 10. Why are crazy ants such a problem in Texas and not in their native home of South America?
- 11. What is one possible solution to reducing the crazy ant population?

Prompts and Extensions

- 1. Learn more about Tawny (Rasberry) Crazy ants <u>here</u>. A video clip of them swarming in the grass is also available.
- 2. Watch this rocking video of fire ants v. crazy ants to see some of the behaviors described in the article you just read.

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- 3. Both fire ants and crazy ants are invasive species; or species that are not native to the current place in which they are found. Invasive species can cause a number of problems to the native species of an area if not properly controlled. Using this website for King County, Washington, choose one invasive species and create a 'Wanted' poster (see these examples) for the invasive species listed that interests you most.
 - In your poster include the following A picture of the species, a description, unique identifying traits, its location/habitat ("hideouts") and a map (if appropriate), what to do if it is found (solutions to the problem), the problems it causes ("suspected crimes").
 - o Templates to create your own 'Wanted' poster can be found here.