Teacher: Because of the algae's short lifespan, they begin to die. What would happen now that we have a lot of dead algae?
Student 1: I'm a mayfly larva so now it might be harder for me to find food.
Student 2 (to Student 1): I'm also a mayfly larva. We still have underwater plants for food.
[Teacher adds "fewer live algae for mayfly larvae to consume" to flowchart] Teacher: What will happen to the dead algae?
Student 3: They decompose!
Teacher: What does that mean?
Student 3: Decomposers will eat them.
Teacher: We don't have any students representing decomposers, so I'm going to be the decomposer. [Teacher circulates to the algae in the group, roleplaying the process of decomposition (e.g., tapping the students who represent the algae population, which would prompt the algae to tug, simulating a disturbance.)] We've discussed how there will be fewer algae, but what do decomposers use, or need, in order to be able to consume the algae as I'm doing now?
Student 4: Water!
Teacher: What else?
Student 5: Oxygen!
[Teacher continues to circulate, simulating "decomposition"] As a decomposer, I'm consuming a lot of dead algae, so I'm going to need a lot of oxygen. Do any other organisms in our pond use oxygen? Who?
Student 6 (perch): I do!
Student 4 (minnow): I do!
Student 2 (minnow): Me too!
Student 7 (mayfly larvae): I do too!
Teacher: What's going to happen now that there's less oxygen available?

[Conversation continues as the teacher helps students to recognize that mayfly larvae would initially be most susceptible. The mayfly larvae tug on the string, which is felt by both the perch and minnows. Ultimately, students can recognize that with decreased populations of mayfly larvae and minnows, the perch will not be able to survive, which is why the farmer at Sunrise Farm pond started seeing dead perch.]