

## **Cascades of Species Interactions Activity Worksheet**

One of the benefits of understanding cascading effects is that it opens the door to potentially preventing future cascades that have negative consequences, e.g., the extinction of a large number of species in a food web, which may lead to the collapse of the network or, at least, major regime changes. Using the below network diagram, highlight the nodes, connections, or parts of the network that correspond best to the following questions. Label them clearly and explain your answer to each. Consider drawing what network results when you implement each. You may use the provided worksheet (an extra diagram is provided) or do your own drawings.

- a) Removal of which node(s) would have the biggest impact on the network?
- b) Which connections are most important to sustaining the integrity of the network, i.e., would preserve most of the network?
- c) Add arrows to the lines to indicate the directionality of interactions that would lead to minimizing cascading effects if node (species) 1 was lost.
- d) Repeat the same step as c, but now what if node 3 was lost?









