## REES YS. FROGS <br> GRADES K-5

## MATERIALS

- A large space or outdoor area safe for kids to run around in.
- Creating bee hats, frog hats and flower hats is optional. (However, this would increase the fun factor!)
- Timer


## DEFINITION

Biodiversity: All the living things in a certain area.
Bioindicators: A living organism that represents of the health of an ecosystem.

## BACKGROUND INFORMATION

Honey bee colony losses are being observed worldwide, which is raising great concern. Scientists estimate that survival of over $80 \%$ of plant species depends directly on pollinators, and more specifically on bees. Any major decline of the pollinating insects' population would have a dramatic impact on biodiversity. Bees are incredibly sensitive to their environment, which is why they are considered to be "bioindicators." This makes bees an emblem for biodiversity. Preserving bees will therefore benefit all kinds of pollinators, plants, animals and people.

## INSTRUCTIONS

1. Divide the group into three concentric circles, one inside the next. The people in the outer circle are flowers, and must stay stationary. The players in the inner circle are bees, and begin the game with one knee to the ground. The players in the middle circle are frogs where they begin the game standing.
2. On "start" the bees have ten seconds to run and tag (pollinate) a flower. They may avoid capture (being tagged by a frog) by flying (touching one knee to the ground). Frogs chase the insects by hopping.
3. After each round, the results are noted. A successful animal remains as that animal for the next round. A captured animal becomes the same animal as his/her captor. If a bee fails to pollinate or a frog fails to feed on a bee, then they die and are eliminated from the game.
4. Each round creates changes in populations and inter-relationships can be easily observed. A balanced game can go on indefinitely, but if frogs become too efficient, the insects are wiped out whereupon the frogs ultimately die.
5. After the game, reflect on the challenges bees face and how that can affect the flowers and frogs as well as other pollinators and even people. Emphasize how everything is connected.

Adapted from: http://childreninnaturepei.ca/pollinationgamesandactivities


