

# **HABby Clam Card Game: Instructions**



How do harmful algae impact seafood safety? Clams and other organisms that eat the toxic phytoplankton Alexandrium can accumulate toxins in their tissues. Marine mammals, birds, or people that eat toxic can clams can become sick, this is known as "Paralytic Shellfish Poisoning." In this game, you will become a hungry clam and will track how your toxicity changes as you eat different phytoplankton. You will play through three different years, each year with different environmental conditions. As you play, think about how these conditions shape the bloom.

# **Gameplay**

Before beginning, separate the *Alexandrium* cards from the main deck. Check the instructions for that year to draw your starting hand and set up the starting bloom. As you play, you will move through months of the year, beginning in March. The cards in your hand will represent the contents of your stomach. **Every month,** take the following actions:

- **1. Poop** Discard two cards from your hand *randomly* (without looking). These cards go face-down into the bloom.
- 2. **Grow the Bloom** *As a group*, follow the instructions specific to that year to remove and add cards face-down to the center. Mix up all the cards every time.
- **3.** Eat Pick two random cards from the bloom and add them to your hand.
- **4. Record** Look at your hand and count the number of *Alexandrium*. Record this as a percent on your datasheet.
- **5.** Roll for Harvest Check your datasheet to see if there is a symbol next to the name of the month. *As a group*, roll the dice once for each so (if there are no so, do not roll). Once a 6 is rolled, this signifies that all the clams have been harvested. See the "harvest" section for further instructions.

## **Harvest**

Once a 6 is rolled, you have been harvested and the year is over! Refer to the toxicity table on your datasheet to determine what symptoms you would give to a person that ate you. At this point you can move on to the next year, or to the reflection portion of the activity if all years have been completed.

Note: if no 6's are rolled the game ends in November.

#### **Year 1: Cold Summer**

Cold temperatures this year make it hard for Alexandrium to bloom.

Starting Hand: Draw 10 cards

from the main deck.

**Starting Bloom:** Place 20 cards from the main deck

face-down.

**Grow the Bloom:** Remove 5 random cards from the bloom. Add 3 from the main deck and 2 from the *Alexandrium* deck.

## **Year 2: Warm Summer**

Warm temperatures fuel the Alexandrium bloom.

**Starting Hand:** Draw 10 cards from the main deck.

**Starting Bloom:** Pull 10 cards from the main deck and 10 cards from the *Alexandrium* deck. Place face-down and mix up all the cards.

Grow the Bloom: Remove 5 random cards from the bloom. Add 5 cards from the Alexandrium deck.

#### **Year 3: Warm Spring**

A warmer-than-usual spring gets the Alexandrium bloom started early.

**Starting Hand:** Draw 5 cards from the main deck and 5 cards from the *Alexandrium* deck.

**Starting Bloom:** Place 20 cards from the *Alexandrium* deck

face-down.

**Grow the Bloom:** Remove 5 random cards from the bloom. Add 5 cards from the main deck.