

# BEATY BIODIVERSITY DECK

## STARTER DECK VERSION 3.0

**Phylo** THE TRADING CARD GAME BETA

THIS DOCUMENT INCLUDES 8 PAGES OF CARDS (48 PHYLO CARDS) AND 1 CARD BACK PAGE.

NOTE THAT CARD SIZE IS IDENTICAL TO THAT OF POKEMON CARDS (62 mm x 87 mm or 2 7/16 inches x 3 7/16 inches).

WE RECOMMEND PRINTING THESE CARDS, IN COLOUR, ON 65LB+ WHITE CARD STOCK.

USING CARD SLEEVE PROTECTORS (~64mm x 89mm) OR LAMINATING CARDS WILL ALSO GREATLY ENHANCE THE FEEL OF THE CARDS.

FOR MORE CARDS, GAME RULES, AND GENERAL INFORMATION ABOUT THE PHYLO PROJECT, PLEASE GO TO:

<http://phylogame.org>

**Himalayan Blackberry** 5 1  
*Rubus armeniacus*



Plantae, Angiosperms, Eudicots  
3 POINTS

**Play:** *Rubus armeniacus* is an **INVASIVE** species of *Plantae* cards of identical scale.

Image by Alexandria Neonakis  
alexneonakis.com/

Cool,  
Warm, Hot

**Steller Sea Lion** 8 3  
*Eumetopias jubatus*



Animalia, Chordata, Mammalia  
8 POINTS

**Play:** *Eumetopias jubatus* has a **MOVE** of 2

**Fact:** *Eumetopias jubatus* feed on a variety of fish, squid and octopus, and sometimes even other seals.

Image by Alexandria Neonakis  
alexneonakis.com/

Cold, Cool

**Killer Whale** 9 3  
*Orcinus orca*



Animalia, Chordata, Mammalia  
10 POINTS

**Play:** *Orcinus orca* has a **MOVE** of 2

**Fact:** *Orcinus orca* feed on fish, sea lions, seals, walruses and even large whales

Image by Kyu Hwang  
kyuhwang.com/

Cold, Cool

**Zooplankton** 2 1  
*Copepoda* subclass



Animalia, Arthropoda, Macillopoda  
2 POINTS

**Play:** *Copepoda* has a **MOVE** of 1. Can feed Salmon, Blue Whale **SPECIES** cards.

**Fact:** *Copepoda* are primarily transported by ambient water currents

Image by Brandy Masch  
www.brandymasch.com/

Cool,  
Warm

**Mycorrhizal Fungi** 3 1  
*Oidiodendron*



Fungi, Basidiomycota, Agaricomycetes  
3 POINTS


**Play:** *Oidiodendron* must be played adjacent to a **PLANT SPECIES**

**Fact:** *Oidiodendron* forms a mutualistic relationship with the roots of most plant species

Image by Kyle McQueen  
kylemcqueen.net/

Cold, Cool,  
Warm, Hot

**Giant Kelp** 8 1  
*Macrocystis pyrifera*




Chromalveolata, Heterokontophyta, Phaeophyta  
4 POINTS

**Fact:** *Macrocystis pyrifera* is one of the fastest-growing organisms on Earth

Image by Lindsay Chetek  
www.lindsaychetek.com/

Cool,  
Warm

**Dragonfly**  
*Anisoptera infraorder* **4** **3**



Animalia, Arthropoda, Insecta  
**8 POINTS**


**Play:** *Anisoptera* has a **FLIGHT** of 2

**Fact:** *Anisoptera* are some of the fastest insects in the world

Image by Brandy Masch  
www.brandymasch.com/

Cool,  
Warm

**Sockeye Salmon**  
*Oncorhynchus nerka* **6** **3**



Animalia, Chordata, Actinopterygii  
**7 POINTS**

**PLAY:** *Oncorhynchus nerka* has a **MOVE** of 2. Can also feed off on **ZOOPLANKTON SPECIES**.

**FACT:** The young fish, known as fry, spend up to three years in the freshwater lake before migrating to the ocean.

Image by Brandy Masch  
www.brandymasch.com/

Cold, Cool

**Clark's Nutcracker**  
*Nucifraga columbiana* **5** **3**



Animalia, Chordata, Aves  
**3 POINTS**

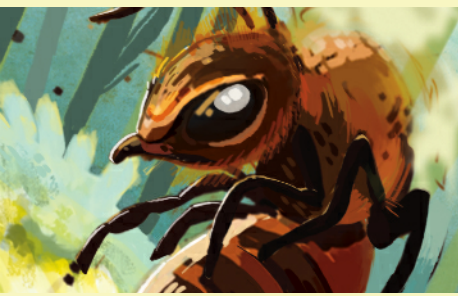
**Play:** *Nucifraga columbiana* has a flight of 2

**Fact:** *Nucifraga columbiana* eat a wide range of insect prey, berries and other fruits, small mammals and flesh from carcasses

Image by Lindsay Chetek  
www.lindsaychetek.com/

Cold, Cool

**European Honey Bee**  
*Apis mellifera* **4** **2**




Animalia, Arthropoda, Insecta  
**5 POINTS**

**Play:** *Apis mellifera* has a **FLIGHT** of 2 and is considered a **POLLINATOR**.

Image by Kyle McQueen  
kylemcqueen.net/

Cool,  
Warm, Hot

**Oil Spill**  
Event Card



Event

**Play:** Place this card on any ocean or fresh water based **SPECIES** card

**Effect:** The **SPECIES** card is **IMMEDIATELY** discarded.

Image by Kyu Hwang  
kyuhwang.com/

**Marbled Murrelet**  
*Brachyramphus marmoratus* **6** **3**



Animalia, Chordata, Aves  
**7 POINTS**

**Play:** *Brachyramphus marmoratus* has a **FLIGHT** of 2


**Fact:** *Brachyramphus marmoratus* are currently **ENDANGERED**

Image by Victoria Heryet  
victoriaheryet.com/

Cool,  
Warm



**Species Protection**  
Event Card



Event

**Play:** You can play this card immediately after your opponent has played an **EVENT** card on one of your **SPECIES**.

**Effect:** Negates the effect of the **EVENT** card. Does not work on **EVENT** cards that are not played specifically on top of **SPECIES**.

Image by *Brandy Masch*  
www.brandymasch.com/

**Moss Mite**  
*Oribatida* order

4 3



Animalia, Arthropod, Arachnida

9 POINTS

**Play:** *Oribatida* has a **MOVE** of 1.

**Fact:** Also known as a Beetle Mite.

Image by *Kyle McQueen*  
kylemcqueen.net/

Warm, Hot

**Whitebark Pine**  
*Pinus albicaulis*

9 1



Plantae, Pinophyta, Pinopsida


3 POINTS

**Fact:** *Pinus albicaulis* may grow more than 20 meters in height if in favorable conditions

Image by *Victoria Heryet*  
victoriaheryet.com/

Cold, Cool

**Wildfire**  
Event Card



Event

**Play:** Place on top of any **SPECIES** card of Grassland or Forest **TERRAIN**

**Effect:** The species card beneath the Wildfire is **IMMEDIATELY** discarded.

Image by *Alexandria Neonakis*  
alexneonakis.com/

**Black Bear**  
*Ursus americanus*

8 3



Animalia, Chordata, Mammalia

5 POINTS

**Play:** *Ursus americanus* has a **MOVE** of 2

**Fact:** *Ursus americanus* are omnivores and their diets vary greatly depending on season and location

Image by *Lindsay Chetek*  
www.lindsaychetek.com/

Cool, Warm

**Habitat Loss**  
Event Card



Event

**Play:** Place this card on any **SPECIES** card and change it's habitat to **URBAN** permanently

**Effect:** This **SPECIES** card must be **IMMEDIATELY** removed. You may leave this card on the table to show this place is now **URBAN** terrain.

Image by *Kyle McQueen*  
kylemcqueen.net/



**Earthworm**  
*Lumbricus terrestris* 4 2



Animalia, Annelida, Clitellata  
4 POINTS

**Play:** *Lumbricus terrestris* has a **MOVE** of 1

**Fact:** Folk names for the *Lumbricus terrestris* include "dew-worm", "rain worm", "night crawler" and "angleworm"

Image by Kyu Hwang  
kyuhwang.com/

Cool, Warm

**Human**  
*Homo sapiens* 8 3




Animalia, Chordata, Mammalia  
3 POINTS

**Play:** *Homo sapiens* has a **MOVE** of 2. Although an omnivore, this card can only be played next to **SPECIES CARD** that represent food that humans would actually eat.

Image by Alexandria Neonakis  
alexneonakis.com/

Cold, Cool, Warm, Hot

**Mosquito**  
*Culicinae* subfamily 4 3



Animalia, Arthropoda, Insecta  
5 POINTS

**Play:** *Culicinae* has a **MOVE** of 2 and may be played next to a Human, Black Bear, Clark's Nutcracker or Whitebark Pine **SPECIES** card.

**Fact:** Many species of mosquitoes are not bloodsuckers, and those that do suck blood, do not transmit disease

Image by Kyu Hwang  
kyuhwang.com/

Cool, Warm, Hot

**Blue Whale**  
*Balaenoptera musculus* 9 3



Animalia, Chordata, Mammalia  
9 POINTS

**Play:** *Balaenoptera musculus* has a **MOVE** of 2 and requires a **KRILL** card for diet

**Fact:** *Balaenoptera musculus* usually live alone or with one other individual.

Image by Brandy Masch  
www.brandymasch.com/

Cold, Cool

**Climate Change**  
Event Card



Event

**Play:** When playing this card, roll six sided die and consult below:

**Effect :** A roll of 1 to 4 - remove the same number of adjacent **SPECIES** cards; 5 or 6 - the game will **RESTART** but this time **WITHOUT** the Climate Change card.

Image by Lindsay Chetek  
www.lindsaychetek.com/

**Three-spined Stickleback**  
*Gasterosteus aculeatus* 5 3



Animalia, Chordata, Actinopterygii  
5 POINTS

**Play:** *Gasterosteus aculeatus* has a **MOVE** of 2 and can also feed on **ZOOPLANKTON**.

**Fact:** *Gasterosteus aculeatus* has a pelvic fin which is used to protect the fish against other fish predators

Image by Alexandria Neonakis  
alexneonakis.com/

Cold, Cool

Home Card

Beaty Biodiversity Museum, Vancouver



1 3 3

Starter

• This is a **HOME** card. The game starts with each player having a **HOME** card played on the table next to each other.

• **HOME** cards represent all **TERRAIN** and **CLIMATE** values.

Image by Derek Tan

www.botany.ubc.ca/derek/portfolio.html

Animalia, Chordata, Mammalia

6 POINTS


Play: *Enhydra lutris* has a **MOVE** of 2

Fact: *Enhydra lutris* preys mostly upon marine invertebrates

Cool, Warm

Sea Otter

*Enhydra lutris*



1 3 3

Animalia, Chordata, Mammalia

6 POINTS


Play: *Enhydra lutris* has a **MOVE** of 2

Fact: *Enhydra lutris* preys mostly upon marine invertebrates

Cool, Warm

Salal

*Gaultheria shallon*



1 3 3

Plantae, Angiosperms, Eudicots


2 POINTS

Fact: *Gaultheria shallon* has thick, tough, egg-shaped leaves which are shiny and dark green on the upper surface, and rough and lighter green on the bottom

Cold, Cool, Warm

Purple Sea Urchin

*Strongylocentrotus purpuratus*



1 3 3

Animalia, Echinodermata, Echinoidea

5 POINTS

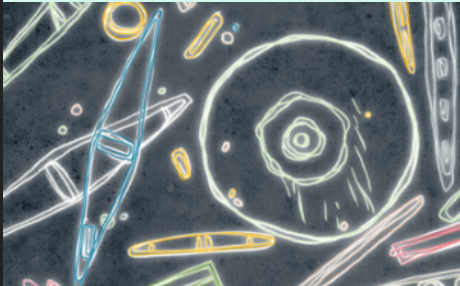
Play: *Strongylocentrotus purpuratus* has a **MOVE** of 1. Must be played adjacent to at least one **OCEAN** terrain.

Fact: *Strongylocentrotus purpuratus* may live as long as 70 years.

Cool

Phytoplankton

Marine and Freshwater variety



1 3 3

Chromalveolata, Cyanobacteria, Dinoflagellata

2 POINTS

Play: *Symbiodinium spp* has a **MOVE** of 1, and is often eaten by **KRILL SPECIES**.

Fact: *Symbiodinium spp* are also crucially dependent on minerals

Cold, Cool, Warm

Isoetes cristatum (Moss)

*Isoetes cristatum*



1 3 3

Bryophyta, Plantae, Sphagnopsida

2 POINTS

Fact: *Isoetes cristatum* are small, soft plants that are typically 1–10 cm tall


Cold, Cool, Warm, Hot

phylogame.org/cards/?selected

1/1



**Himalayan Blackberry**  
*Rubus armeniacus* **5 1**




Plantae, Angiosperms, Eudicots  
**3 POINTS**

**Play:** *Rubus armeniacus* is an **INVASIVE** species of Plantae cards of identical scale.

Image by Alexandria Neonakis  
alexneonakis.com/

Cool,  
Warm, Hot

**Oil Spill**  
Event Card




Event

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**Effect:** The **SPECIES** card is **IMMEDIATELY** discarded.

Image by Kyu Hwang  
kyuhwang.com/

**Species Protection**  
Event Card



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**Play:** You can play this card immediately after your opponent has played an **EVENT** card on one of your **SPECIES**.

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Image by Brandy Masch  
www.brandymasch.com/

**Whitebark Pine**  
*Pinus albicaulis* **9 1**




Plantae, Pinophyta, Pinopsida  
**3 POINTS**

**Fact:** *Pinus albicaulis* may grow more than 20 meters in height if in favorable conditions

Image by Victoria Heryet  
victoriaheryet.com/

Cold, Cool

**Wildfire**  
Event Card




Event

**Play:** Place on top of any **SPECIES** card of Grassland or Forest **TERRAIN**

**Effect:** The species card beneath the Wildfire is **IMMEDIATELY** discarded.

Image by Alexandria Neonakis  
alexneonakis.com/

**Habitat Loss**  
Event Card



Event

**Play:** Place this card on any **SPECIES** card and change it's habitat to **URBAN** permanently

**Effect:** This **SPECIES** card must be **IMMEDIATELY** removed. You may leave this card on the table to show this place is now **URBAN** terrain.

Image by Kyle McQueen  
kylemcqueen.net/

**Zooplankton**  
*Copepoda subclass* **2 1**



Animalia, Arthropoda, Macillopoda  
**2 POINTS**


**Play:** *Copepoda* has a **MOVE** of 1. Can feed Salmon, Blue Whale **SPECIES** cards.

**Fact:** *Copepoda* are primarily transported by ambient water currents

Image by Brandy Masch  
www.brandymasch.com/

Cool, Warm

**Giant Kelp**  
*Macrocystis pyrifera* **8 1**



Chromalveolata, Heterokontophyta, Phaeophyta  
**4 POINTS**

**Fact:** *Macrocystis pyrifera* is one of the fastest-growing organisms on Earth

Image by Lindsay Chetek  
www.lindsaychetek.com/

Cool, Warm

**Oil Spill**  
Event Card




Event

**Play:** Place this card on any ocean or fresh water based **SPECIES** card

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Image by Kyu Hwang  
kyuhwang.com/

**Wildfire**  
Event Card




Event

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Image by Alexandria Neonakis  
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**Habitat Loss**  
Event Card



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Image by Kyle McQueen  
kylemcqueen.net/

**Pacific Krill**  
*Euphausia pacifica* **4 2**



Animalia, Arthropoda, Malacostraca  
**6 POINTS**

**Play:** *Euphausia pacifica* has a **MOVE** of 1. Should be played adjacent to a **PLANKTON** species card.


**Fact:** *Euphausia pacifica* oil can be used as a food supplement

Image by Victoria Heryet  
victoriaheryet.com/

Cold, Cool



**Home Card**  
Beaty Biodiversity Museum, Vancouver



Starter

- This is a **HOME** card. The game starts with each player having a **HOME** card played on the table next to each other.
- **HOME** cards represent all **TERRAIN** and **CLIMATE** values.

Image by *Derek Tan*  
[www.botany.ubc.ca/derek/portfolio.html](http://www.botany.ubc.ca/derek/portfolio.html)

**European Honey Bee**  
*Apis mellifera*

4 2



Animalia, Arthropoda, Insecta


5 POINTS

**Play:** *Apis mellifera* has a **FLIGHT** of 2 and is considered a **POLLINATOR**.

Image by *Kyle McQueen*  
[kylemcqueen.net/](http://kylemcqueen.net/)

Cool, Warm, Hot

**Oil Spill**  
Event Card




Event

**Play:** Place this card on any ocean or fresh water based **SPECIES** card

**Effect:** The **SPECIES** card is **IMMEDIATELY** discarded.

Image by *Kyu Hwang*  
[kyuhwang.com/](http://kyuhwang.com/)

**Wildfire**  
Event Card



Event

**Play:** Place on top of any **SPECIES** card of Grassland or Forest **TERRAIN**

**Effect:** The species card beneath the Wildfire is **IMMEDIATELY** discarded.

Image by *Alexandria Neonakis*  
[alexneonakis.com/](http://alexneonakis.com/)

**Pacific Krill**  
*Euphausia pacifica*

4 2



Animalia, Arthropoda, Malacostraca

6 POINTS

**Play:** *Euphausia pacifica* has a **MOVE** of 1. Should be played adjacent to a **PLANKTON** species card.

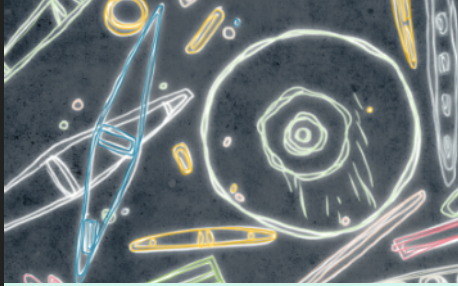
**Fact:** *Euphausia pacifica* oil can be used as a food supplement

Image by *Victoria Heryet*  
[victoriaheryet.com/](http://victoriaheryet.com/)

Cold, Cool

**Phytoplankton**  
Marine and Freshwater variety

2 1



Chromalveolata, Cyanobacteria, Dinoflagell

2 POINTS

**Play:** *Symbiodinium spp* has a **MOVE** of 1, and is often eaten by **KRILL SPECIES**.

**Fact:** *Symbiodinium spp* are also crucially dependent on minerals

Image by *Kyu Hwang*  
[kyuhwang.com/](http://kyuhwang.com/)

Cold, Cool, Warm





phylogame.org card back  
pattern: suzanne norris | [www.sakurasnow.com](http://www.sakurasnow.com)  
logo: haley fiege | [www.kingdomofawesome.com](http://www.kingdomofawesome.com)

