

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
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

Steller Sea Lion
Eumetopias jubatus

8 3

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
Orcinus orca

9 3

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
Copepoda subclass

2 1

Animalia, Arthropoda, Macrillopoda
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
Oidiodendron

3 1

Fungi, Basidiomycota, Agromycomycetes
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
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

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



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

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

Fact: Also known as a Beetle Mite.

Image by *Kyle McQueen*
kylemcqueen.net/

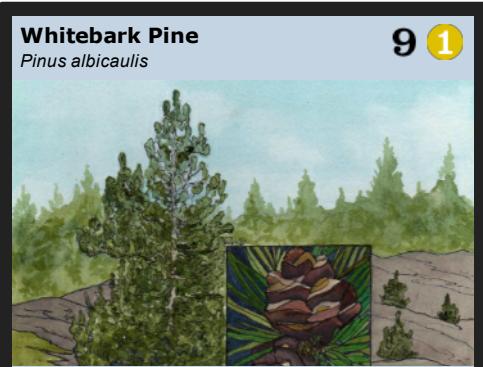
9 POINTS

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

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

Image by *Victoria Heryet*
victoriaheryet.com/

3 POINTS

Cold, Cool

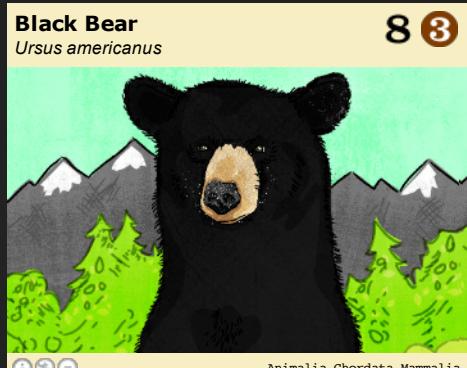
**Wildfire**

Event Card

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

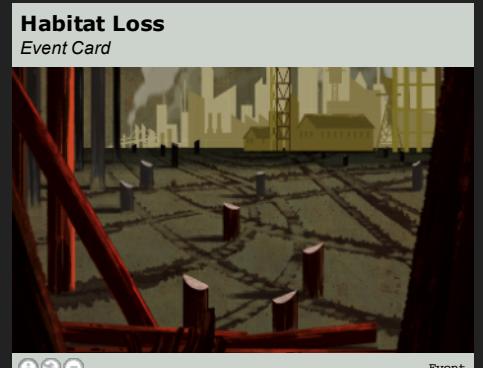
Play: *Ursus americanus* has a **MOVE** of 2

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

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

5 POINTS

Cool, Warm

**Habitat Loss**

Event Card

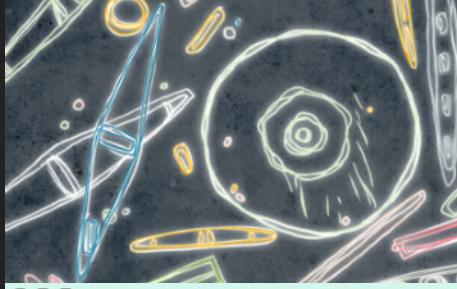
Play: Place this card on any **SPECIES** card and change it's habitat to **URBAN** permanently

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/

Event

<p>Earthworm <i>Lumbricus terrestris</i></p>  <p>4 2</p> <p>Animalia, Annelida, Clitellata</p> <p>4 POINTS</p> <p>Play: <i>Lumbricus terrestris</i> has a MOVE of 1</p> <p>Fact: Folk names for the <i>Lumbricus terrestris</i> include "dew-worm", "rain worm", "night crawler" and "angleworm"</p> <p>Image by Kyu Hwang kyuhwang.com/</p> <p>Cool, Warm</p>	<p>Human <i>Homo sapiens</i></p>  <p>8 3</p> <p>Animalia, Chordata, Mammalia</p> <p>3 POINTS</p> <p>Play: <i>Homo sapien</i> 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.</p> <p>Image by Alexandria Neonakis alexneonakis.com/</p> <p>Cold, Cool, Warm, Hot</p>	<p>Mosquito <i>Culicinæ subfamily</i></p>  <p>4 3</p> <p>Animalia, Arthropoda, Insecta</p> <p>5 POINTS</p> <p>Play: <i>Culicinæ</i> has a MOVE of 2 and may be played next to a Human, Black Bear, Clark's Nutcracker or Whitebark Pine SPECIES card.</p> <p>Fact: Many species of mosquitoes are not bloodsuckers.</p> <p>Image by Kyu Hwang kyuhwang.com/</p> <p>Cool, Warm, Hot</p>
<p>Blue Whale <i>Balaenoptera musculus</i></p>  <p>9 3</p> <p>Animalia, Chordata, Mammalia</p> <p>9 POINTS</p> <p>Play: <i>Balaenoptera musculus</i> has a MOVE of 2 and requires a KRILL card for diet</p> <p>Fact: <i>Balaenoptera musculus</i> usually live alone or with one other individual.</p> <p>Image by Brandy Masch www.brandymasch.com/</p> <p>Cold, Cool</p>	<p>Climate Change Event Card</p>  <p>Event</p> <p>Play: When playing this card, roll six sided die and consult below:</p> <p>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.</p> <p>Image by Lindsay Chetek www.lindsaychetek.com/</p>	<p>Three-spined Stickleback <i>Gasterosteus aculeatus</i></p>  <p>5 3</p> <p>Animalia, Chordata, Actinopterygii</p> <p>5 POINTS</p> <p>Play: <i>Gasterosteus aculeatus</i> has a MOVE of 2 and can also feed on ZOOPLANKTON.</p> <p>Fact: <i>Gasterosteus aculeatus</i> has a pelvic fin which is used to protect the fish against other fish predators</p> <p>Image by Alexandria Neonakis alexneonakis.com/</p> <p>Cold, Cool</p>

<p>Home Card Beatty Biodiversity Museum, Vancouver</p>  <p>Starter</p> <ul style="list-style-type: none"> 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. <p>Image by <i>Derek Tan</i> www.botany.ubc.ca/derek/portfolio.html</p>	<p>Sea Otter <i>Enhydra lutris</i></p>  <p>7 3</p> <p>Animalia,Chordata,Mammalia 6 POINTS</p> <p>Play: <i>Enhydra lutris</i> has a MOVE of 2</p> <p>Fact: <i>Enhydra lutris</i> preys mostly upon marine invertebrates</p> <p>Cool, Warm</p> <p>Image by <i>Victoria Heryet</i> victoriaheryet.com/</p>	<p>Salal <i>Gaultheria shallon</i></p>  <p>5 1</p> <p>Plantae,Angiosperms,Eudicots 2 POINTS</p> <p>Fact: <i>Gaultheria shallon</i> has thick, tough, egg-shaped leaves which are shiny and dark green on the upper surface, and rough and lighter green on the bottom</p> <p>Cold, Cool, Warm</p> <p>Image by <i>Kyle McQueen</i> kylemcqueen.net/</p>
<p>Purple Sea Urchin <i>Strongylocentrotus purpuratus</i></p>  <p>5 2</p> <p>Animalia,Echinodermata,Echinoidea 5 POINTS</p> <p>Play: <i>Strongylocentrotus purpuratus</i> has a MOVE of 1. Must be played adjacent to at least one OCEAN terrain.</p> <p>Fact: <i>Strongylocentrotus purpuratus</i> may live as long as 70 years.</p> <p>Cool</p> <p>Image by <i>Lindsay Chetek</i> www.lindsaychetek.com/</p>	<p>Phytoplankton Marine and Freshwater variety</p>  <p>2 1</p> <p>Chromalveolata,Cyanobacteria,Dinoflagell 2 POINTS</p> <p>Play: <i>Symbiodinium spp</i> has a MOVE of 1, and is often eaten by KRILL SPECIES.</p> <p>Fact: <i>Symbiodinium spp</i> are also crucially dependent on minerals</p> <p>Cold, Cool, Warm</p> <p>Image by <i>Kyu Hwang</i> kyuhwang.com/</p>	<p>Isothecium cristatum (Moss) <i>Isothecium cristatum</i></p>  <p>5 1</p> <p>Bryophyta,Plantae,Sphagnopsida 2 POINTS</p> <p>Fact: <i>Isothecium cristatum</i> are small, soft plants that are typically 1–10 cm tall</p> <p>Cold, Cool, Warm, Hot</p> <p>Image by <i>Victoria Heryet</i> victoriaheryet.com/</p>

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**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

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/**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/**Wildfire**

Event Card

Event



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/

<p>Zooplankton Copepoda subclass</p>  <p>2 1</p> <p>Animalia, Arthropoda, Malillopooda</p> <p>2 POINTS</p> <p>Play: Copepoda has a MOVE of 1. Can feed Salmon, Blue Whale SPECIES cards.</p> <p>Fact: Copepoda are primarily transported by ambient water currents</p> <p>Image by Brandy Masch www.brandymasch.com/</p> <p>Cool, Warm</p>	<p>Giant Kelp <i>Macrocystis pyrifera</i></p>  <p>8 1</p> <p>Chromalveolata, Heterokontophyta, Phaeophyceae</p> <p>4 POINTS</p> <p>Fact: <i>Macrocystis pyrifera</i> is one of the fastest-growing organisms on Earth</p> <p>Image by Lindsay Chetek www.lindsaychetek.com/</p> <p>Cool, Warm</p>	<p>Oil Spill Event Card</p>  <p>Event</p> <p>Play: Place this card on any ocean or fresh water based SPECIES card</p> <p>Effect: The SPECIES card is IMMEDIATELY discarded.</p> <p>Image by Kyu Hwang kyuhwang.com/</p> <p>Cool, Warm</p>
<p>Wildfire Event Card</p>  <p>Event</p> <p>Play: Place on top of any SPECIES card of Grassland or Forest TERRAIN</p> <p>Effect: The species card beneath the Wildfire is IMMEDIATELY discarded.</p> <p>Image by Alexandria Neonakis alexneonakis.com/</p>	<p>Habitat Loss Event Card</p>  <p>Event</p> <p>Play: Place this card on any SPECIES card and change its habitat to URBAN permanently</p> <p>Effect: This SPECIES card must be IMMEDIATELY removed. You may leave this card on the table to show this place is now URBAN terrain.</p> <p>Image by Kyle McQueen kylemcqueen.net/</p> <p>Cool, Warm</p>	<p>Pacific Krill <i>Euphausia pacifica</i></p>  <p>4 2</p> <p>Animalia, Arthropoda, Malacostraca</p> <p>6 POINTS</p> <p>Play: <i>Euphausia pacifica</i> has a MOVE of 1. Should be played adjacent to a PLANKTON species card.</p> <p>Fact: <i>Euphausia pacifica</i> oil can be used as a food supplement</p> <p>Image by Victoria Heryet victoriaheryet.com/</p> <p>Cold, Cool</p>

Home Card
Beatty 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

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/

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.

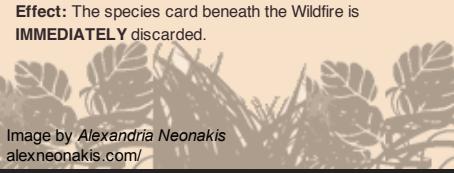


Image by *Alexandria Neonakis*
alexneonakis.com/

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

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

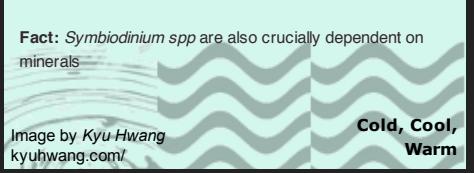


Image by *Kyu Hwang*
kyuhwang.com/

Cold, Cool, Warm



phylogame.org card back
pattern: suzanne norris | www.sakurasnow.com
logo: haley fiege | www.kingdomofawesome.com

