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DANDELION

Taraxacum officinale



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TYPE: Producer

NATURAL HISTORY: The name dandelion derives from the French “dent de lion”, which means lion’s tooth, a reference to the jagged leaves.

1

ENGLISH OAK

Quercus robur



300



TYPE: Producer

NATURAL HISTORY: A majestic, long-lived tree, widely used for its hard, long-lasting timber. Oak has symbolic meaning in many European cultures, and is often featured in art in heraldry.

1

FIELD MAPLE

Acer campestre



300



TYPE: Producer

NATURAL HISTORY: This deciduous tree sometimes appears shrubby. Sometimes called Hedge Maple.

1

SYCAMORE

Acer pseudoplatanus



300



TYPE: Producer

NATURAL HISTORY: Widely regarded in the UK as a non-native species because it was introduced after Roman conquest, the sycamore is very important ecologically, producing abundant nectar and supporting a lot of aphids which are important food for other wildlife.

1

ASH

Fraxinus excelsior



300



TYPE: Producer

NATURAL HISTORY: Its common name goes back to the Old English *æsc*, meaning spears made of ash wood. A new fungal disease called ash dieback is now threatening British populations.

1

HORSE CHESTNUT

Aesculus hippocastanum



300



TYPE: Producer

NATURAL HISTORY: The seeds of this tree are the object of the popular kids’ game of conkers. The word conker derives from “conch”, because the game used to be played with snail shells.

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Chêne pédonculé (*Quercus robur*) by Jean-Pol GRANDMONT available at https://upload.wikimedia.org/wikipedia/commons/e/e8/Quercus_robur.JPG_%28a%29.jpg under CC BY-SA 3.0

Invaders by Nicholas A. Tonelli available at https://commons.wikimedia.org/wiki/Category:Taraxacum_officinale#/media/File:Flickr_-_Nicholas_T_-_Invaders.jpg under CC BY 2.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Sapindales
Family: Sapindaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Fagales
Family: Fagaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Asterales
Family: Asteraceae

Marronnier commun ou Marronnier d'Inde (*Aesculus hippocastanum*) by Jean-Pol GRANDMONT available at https://upload.wikimedia.org/wikipedia/commons/6/67/0_Aesculus_hippocastanum_-_Mariemont_1.JPG under CC BY 3.0

Sycamore Maple (*Acer pseudoplatanus*) by Willow available at https://commons.wikimedia.org/wiki/Acer_pseudoplatanus#/media/File:Acer_pseudoplatanus_002.jpg under CC BY-SA 2.5

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Sapindales
Family: Sapindaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Lamiales
Family: Oleaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Sapindales
Family: Sapindaceae

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**BRAMBLE***Rubus fruticosus*

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**TYPE:** Producer**NATURAL HISTORY:** The generic name means blackberry in Latin and was derived from the word ruber, meaning "red".

1

OX-EYE DAISY*Leucanthemum vulgare*

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**TYPE:** Producer**NATURAL HISTORY:** Despite having a bitter taste, young leaves of the ox-eye daisy are eaten in salads in parts of Italy.

1

CREeping BUTTERCUP*Ranunculus repens*

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**TYPE:** Producer**NATURAL HISTORY:** Poisonous when raw, but its toxins are unstable and are lost when dried in hay or cooked.

1

YEW*Taxus baccata*

50



100

**TYPE:** Producer**NATURAL HISTORY:** All parts of this tree are poisonous except the red fruit arils. The seeds are dispersed by birds. They avoid the toxins from the seed by swallowing the fruit whole, so the seed passes through them unharmed.

1

WYCH ELM*Ulmus glabra*

300

**TYPE:** Producer**NATURAL HISTORY:** The word wych has its origins in Middle English wiche, from the Old English wice, meaning pliant or supple.

1

STINGING NETTLE*Urtica dioica*

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**TYPE:** Producer**NATURAL HISTORY:** The younger leaves are tender and edible. And Dorset hosts the annual World Nettle Eating Championship, where they are eaten raw.

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Ranunculus repens by Frank Vincentz available at https://commons.wikimedia.org/wiki/Ranunculus_repens#/media/File:Ranunculus_repens_01_ies.jpg under CC BY-SA 3.0

Leucanthemum vulgare 'Filigran' Flower 2200px by PatriciaR available at https://en.wikipedia.org/wiki/Leucanthemum_vulgare#/media/File:Leucanthemum_vulgare_%27Filigran%27_Flower_2200px.jpg under CC BY-SA 3.0

ECO-DIVO

ECO-DIVO

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC:
Order: Ranunculales
Family: Ranunculaceae



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Asterales
Family: Asteraceae



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Rosales
Family: Rosaceae

Brennessel 1 by MPF available at https://commons.wikimedia.org/wiki/Urtica_dioica#/media/File:Brennessel_1.JPG under CC BY-SA 3.0

Bergulme (Ulmus glabra) by Willow available at https://commons.wikimedia.org/wiki/Ulmus_glabra#/media/File:Ulmus_glabra_001.jpg under CC BY 2.5

Taxus baccata by H. Zell available at https://commons.wikimedia.org/wiki/Taxus_baccata#/media/File:Taxus_baccata_001.JPG under CC BY-SA 3.0

ECO-DIVO

ECO-DIVO

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Rosales
Family: Urticaceae



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Rosales
Family: Ulmaceae



Kingdom: Plantae
UGA(Division): Pinophyta
UGB(Class): Pinopsida
UGC:
Order: Pinales
Family: Taxaceae

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CUCKOOFLOWER

Cardamine pratensis



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TYPE: Producer

NATURAL HISTORY: The name cuckooflower comes from the fact that the plant flowers at the same time when cuckoos (*Cuculus canorus*) return to the UK from migration.

1

CANDYTUFT

Iberis amara



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TYPE: Producer

NATURAL HISTORY: The name "candytuft" is not related to candy, but derives from Candia, the former name of Iraklion on the Island of Crete.

1

GARLIC MUSTARD

Alliaria petiolata



50



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TYPE: Producer

NATURAL HISTORY: Plants are often found growing along the margins of hedges, giving rise to the old British folk name of Jack-by-the-hedge.

1

BITING STONECROP

Sedum acre



50



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TYPE: Producer

NATURAL HISTORY: In the Hebrides, it is said that it used to be planted on roofs as a means of warding off evil spirits, witches and lightning.

1

DOG-ROSE

Rosa canina



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100



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TYPE: Producer

NATURAL HISTORY: The fruit is noted for its high vitamin C level and is used to make syrup, tea and marmalade.

1

COMMON GORSE

Ulex europaeus



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100



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TYPE: Producer

NATURAL HISTORY: Gorse is sometimes called "Furze". The word Furze comes from the Anglo-Saxon name fyrs, while the word gorse is also from an Anglo Saxon name "gorst" -meaning a waste, a reference to the open moorlands on which it is found.

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Garlic Mustard - *Alliaria petiolata* by Tony Atkin available at https://commons.wikimedia.org/wiki/Alliaria_petiolata#/media/File:Garlic_Mustard_-_Alliaria_petiolata_-_geograph.org.uk_-_160932.jpg under CC BY-SA 2.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Brassicales
Family: Brassicaceae



Iberis amara, Brassicaceae, Bitter Candytuft, inflorescences by H. Zell available at https://commons.wikimedia.org/wiki/Iberis_amara#/media/File:Iberis_amara_002.JPG under CC BY-SA 3.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Brassicales
Family: Brassicaceae



Meienberg nearby Rapperswil respectively Jona (Switzerland) by Roland zh available at [https://commons.wikimedia.org/wiki/Cardamine_pratensis#/media/File:Meienberg_\(Rapperswil-Jona\)_IMG_9633.JPG](https://commons.wikimedia.org/wiki/Cardamine_pratensis#/media/File:Meienberg_(Rapperswil-Jona)_IMG_9633.JPG) under CC BY-SA 3.0



Kingdom: Plantae
UGA: Rosids
UGB: UGB:
UGC: UGC:
Order: Brassicales
Family: Brassicaceae



Common Gorse (*Ulex europaeus*) (17022201008).jpg by berniedup available at https://upload.wikimedia.org/wikipedia/commons/d/db/Common_Gorse_%28Ulex_europaeus%29_%2817022201008%29.jpg?uselang=en-gb under CC-BY-SA-2.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Fabales
Family: Fabaceae



Rosa canina plant in Belgium (Hamois) by Luc Viatour available at https://commons.wikimedia.org/wiki/Rosa_canina#/media/File:Rosa_canina_plant_Luc_Viatour.JPG under CC BY-SA 3.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Rosales
Family: Rosaceae



Sedum acre, Crassulaceae, Goldmoss Stonecrop, Goldmoss Sedum, Biting Stonecrop, Wallpepper, habitus, Karlsruhe, Germany by H. Zell available at https://commons.wikimedia.org/wiki/Sedum_acre#/media/File:Sedum_acre_001.JPG under CC BY-SA 3.0 under CC BY-SA 3.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Core eudicots
Order: Saxifragales
Family: Crassulaceae



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GREATER BIRD'S-FOOT-TREFOIL

Lotus pedunculatus



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TYPE: Producer

NATURAL HISTORY: Named after the appearance of its seed pods, which resemble a bird's foot. "Trefoil" means "three-leaved".

1

WOOD SORREL

Oxalis acetosella



50



TYPE: Producer

NATURAL HISTORY: Given as a gift on St. Patrick's Day due to its trifoliate clover-like leaf, explains early references to shamrock being eaten.

1

MARSH MALLOW

Althaea officinalis



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50



TYPE: Producer

NATURAL HISTORY: Before the modern use of gelatin, marshmallows used to be made from the root of this plant, which has gelling properties.

1

SWEET VIOLET

Viola odorata



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TYPE: Producer

NATURAL HISTORY: Sweet scent of this flower popular in the late Victorian period, and has been used in the production of many cosmetic fragrances.

1

PRIMROSE

Primula vulgaris



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TYPE: Producer

NATURAL HISTORY: To prevent excessive damage to the species, picking of primroses or the removal of primrose plants from the wild is illegal in many countries like the UK.

1

COWSLIP

Primula veris



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TYPE: Producer

NATURAL HISTORY: Once widely used in Britain for anything from posies to wine-making, it is now much rarer and protected.

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Guimauve officinale (*Althaea officinalis*) dans les prés salés de la plage de Donnant, Belle-Île-en-Mer by Patrice78500 available at https://commons.wikimedia.org/wiki/Althaea_officialis#/media/File:Guimauve_officinale_dans_les_pr%C3%A9s_sal%C3%A9s_de_la_plage_de_Donnant.JPG under CC BY-SA 4.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Malvales
Family: Malvaceae

Lorus uliginosus from Commanster, Belgian High Ardennes by James K. Lindsey available at https://commons.wikimedia.org/wiki/Category:Lorus_pedunculatus#/media/File:Lorus.uliginosus2.-lindsey.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Oxalidales
Family: Oxalidaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Fabales
Family: Fabaceae

Primula veris.L (Gailbiksite) Photo shot in Latvia by Alvals available at https://commons.wikimedia.org/wiki/Primula_veris#/media/File:Primula_veris_0x.JPG under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Ericales
Family: Primulaceae

Primulas in grass by Blood Destructor available at https://commons.wikimedia.org/wiki/Primula_vulgaris#/media/File:Primev%C3%A8res_2.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Ericales
Family: Primulaceae

Maarts viooltje (*Viola odorata*) by Onderwijsgek available at https://commons.wikimedia.org/wiki/Viola_odorata#/media/File:Viola_odorata_Maarts_viooltje.JPG under CC BY-SA 2.5 nl

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Malpighiales
Family: Violaceae

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**BELL HEATHER***Erica cinerea*

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**TYPE:** Producer**NATURAL HISTORY:** Bell heather can be found growing in dry heaths alongside heather. This family of plants has a symbiotic relationship with several types of fungi that grow inside and between some of the plant root cells.

1

LESSER PERIWINKLE*Vinca minor*

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**TYPE:** Producer**NATURAL HISTORY:** Contains the alkaloid 'vincamine', which is used by the pharmaceutical industry as a cerebral stimulant and vasodilator. Poisonous in large quantities.

1

BORAGE*Borago officinalis*

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**TYPE:** Producer**NATURAL HISTORY:** A bee-friendly plant that is rich in nectar.

1

WOOD FORGET-ME-NOT*Myosotis sylvatica*

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**TYPE:** Producer**NATURAL HISTORY:** The name of this plant refers to not forgetting in several European languages, possibly through shared mythology.

1

FOXGLOVE*Digitalis purpurea*

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**TYPE:** Producer**NATURAL HISTORY:** Well known as the original source of the heart medicine digoxin. Poisonous in large quantities.

1

COMMON CORNSALAD*Valerianella locusta*

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**TYPE:** Producer**NATURAL HISTORY:** Edible leaf vegetable with a characteristic nutty flavor and soft texture, popularly served as salad greens.

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Borago officinalis i Bergianska trädgården by C T Johansson available at https://commons.wikimedia.org/wiki/Borago_officinalis#/media/File:Borago_officinalis-IMG_4346.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: (unplaced)
Family: Boraginaceae

Vinca minor, Apocynaceae, Lesser Periwinkle, flower; Karlsruhe, Germany by H. Zell available at https://commons.wikimedia.org/wiki/Vinca_minor#/media/File:Vinca_minor_002.JPG under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Gentianales
Family: Apocynaceae

Erica cinerea by Ghislain118 available at https://commons.wikimedia.org/wiki/Erica_cinerea#/media/File:Erica_cinerea_2.JPG under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Ericales
Family: Ericaceae

Photo of corn salad taken close up in early spring by Tarquin available at https://commons.wikimedia.org/wiki/Valerianella_locusta#/media/File:Corn_salad_spring_close_up.JPG under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Dipsacales
Family: Caprifoliaceae

Digitale pourpre (Digitalis purpurea) - Habitat: Évisa (Corse-du-Sud) - France by Jean-Pol GRANDMONT available at https://commons.wikimedia.org/wiki/Digitalis_purpurea#/media/File:Digitalis_purpurea.JPG1.jpg under CC BY 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Lamiales
Family: Plantaginaceae

Myosotis sylvatica by Meneerke bloem available at https://commons.wikimedia.org/wiki/Myosotis_sylvatica#/media/File:Myosotis_sylvatica001.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Lamiales
Family: Boraginaceae

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TEASEL

Dipsacus fullonum



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TYPE: Producer

NATURAL HISTORY: The leaves fuse around the stem to form a cup. An experiment has shown that adding dead insects to these cups increases the seedset of teasels, implying partial carnivory.

1

WILD CHICORY

Cichorium intybus



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TYPE: Producer

NATURAL HISTORY: The roots (var. sativum) are baked, ground, and used as a coffee substitute and additive.

1

LILY-OF-THE-VALLEY

Convallaria majalis



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TYPE: Producer

NATURAL HISTORY: Sweetly scented, highly poisonous woodland flowering plant that is native throughout the cool temperate Northern Hemisphere in Asia, and Europe.

1

SNAKE'S-HEAD FRITILLARY

Fritillaria meleagris



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TYPE: Producer

NATURAL HISTORY: The common name "snake's head" refers to the snakelike appearance of the nodding flower heads on their long stems.

1

RAMSON

Allium ursinum



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TYPE: Producer

NATURAL HISTORY: Wild garlic. The scientific name ursinum refers to the brown bear's taste for the bulbs and its habit of digging up the ground to get at them.

1

ENGLISH BLUEBELL

Hyacinthoides non-scripta



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TYPE: Producer

NATURAL HISTORY: The native bluebell is easy to distinguish from the introduced Spanish bluebell by the way the flowers droop on the stem.

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Convallaria majalis by Kurt Stueber available at https://commons.wikimedia.org/wiki/Convallaria_majalis#/media/File:Convallaria_majalis1.jpg under CC BY-SA 3.0

Cykoria podroznik pokroj by Nova available at https://commons.wikimedia.org/wiki/Cichorium_intybus#/media/File:Cykoria_podroznik_pokroj.jpg under CC BY-SA 3.0

Dipsacus fullonum, St Mary's Wetland, Northumberland, UK by MPF available at https://commons.wikimedia.org/wiki/Dipsacus_fullonum#/media/File:Dipsacus_fullonum1.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC:
Order: Asparagales
Family: Asparagaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Asterales
Family: Asteraceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Dipsacales
Family: Caprifoliaceae

Bluebells, somewhere by Phil "aplosh" available at https://commons.wikimedia.org/wiki/Hyacinthoides_non-scripta#/media/File:Bluebells.jpg under CC BY 2.0

Allium ursinum L. by Lisa Carter available at https://commons.wikimedia.org/wiki/Allium_ursinum#/media/File:Ramsons_700.jpg under CC BY-SA 3.0

Snake's Head Fritillary (Fritillaria meleagris) on Ljubljana marsh, Slovenia by Yerro available at https://commons.wikimedia.org/wiki/Fritillaria_meleagris#/media/File:Fritillaria_meleagris_LJ_barje.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC:
Order: Asparagales
Family: Asparagaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC:
Order: Asparagales
Family: Amaryllidaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC:
Order: Liliales
Family: Liliaceae

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LORDS-AND-LADIES

Arum maculatum



50



TYPE: Producer

NATURAL HISTORY: Name refers to the plant's likeness to male and female genitalia symbolising copulation.

1

COMMON SPOTTED-ORCHID

Dactylorhiza fuchsii



50



TYPE: Producer

NATURAL HISTORY: These orchids attract insect pollinators by their sweet scent, but offer no nectar in return.

1

BULRUSH

Typha latifolia



100



TYPE: Producer

NATURAL HISTORY: Bulrush stem has saponic (soapy) compounds which can be used as a natural detergent.

1

WOOD ANEMONE

Anemone nemorosa



50



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TYPE: Producer

NATURAL HISTORY: The plant contains poisonous chemicals that are toxic to animals including humans, but it has also been used as a medicine.

1

RAGGED ROBIN

Lychnis flos-cuculi



50



50



TYPE: Producer

NATURAL HISTORY: The scientific name refers to the cuckoo, as the plant flowers around the time cuckoos return to Europe from Africa.

1

BLADDER CAMPION

Silene vulgaris



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TYPE: Producer

NATURAL HISTORY: The leaves are edible, and the domesticated form of the plant is used as a spring vegetable in Italy.

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Dactylorhiza fuchsii by Pijnack available at https://commons.wikimedia.org/wiki/Dactylorhiza_fuchsii#/media/File:Bosorchis.jpg under CC BY-SA 3.0

Arum maculatum Fluy (Somme), France by Olivier Pichard available at https://commons.wikimedia.org/wiki/Arum_maculatum#/media/File:Arum_maculatum_fluy_80_05052007_4.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC: Commelinids
Order: Poales
Family: Typhaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC:
Order: Asparagales
Family: Orchidaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Monocots
UGC:
Order: Alismatales
Family: Araceae

Aufgeblasenes Leimkraut bzw. Taubenkropf-Leimkraut (*Silene vulgaris*), aufgenommen im Gerstrubental (Allgäuer Alpen) by Michael H. Lemmer available at https://commons.wikimedia.org/wiki/Silene_vulgaris#/media/File:Silene-vulgaris-170704-800-1.jpg under CC BY-SA 2.5

Firletka_poszarpana *Lychnis flos-cuculi* by Pleple2000 available at https://commons.wikimedia.org/wiki/Lychnis_flos-cuculi#/media/File:Firletka_poszarpana_-_portret_648.jpg under CC BY-SA 3.0

Anemone nemorosa by Nova available at https://commons.wikimedia.org/wiki/Anemone_nemorosa#/media/File:Zawilec_gajowy02.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Core eudicots
Order: Caryophyllales
Family: Caryophyllaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Core eudicots
Order: Caryophyllales
Family: Caryophyllaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC:
Order: Ranunculales
Family: Ranunculaceae

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50



FAT HEN

Chenopodium album



50



TYPE: Producer

NATURAL HISTORY: Quick growing annual occurring on disturbed ground. Edible and used to be a common salad ingredient, now neglected as a food.

1

BROAD-LEAVED DOCK

Rumex obtusifolius



100



TYPE: Producer

NATURAL HISTORY: Dock is very attractive to the black aphid, which often completely cover the flowering stalk in the summer. Used by organic gardeners to attract aphids away from useful crops.

1

HAZEL

Corylus avellana



50



300



TYPE: Producer

NATURAL HISTORY: Hazel is often coppiced (cut to the ground to encourage regrowth), and the new wood was used in everything from pea sticks to construction.

1

WHITE WILLOW

Salix alba



300



TYPE: Producer

NATURAL HISTORY: The bark of willow contains salicin, an anti-inflammatory agent used to treat fevers by many cultures around the world. Derivative of salicin, acetylsalicylic acid is the active ingredient in aspirin.

1

LARCH

Larix decidua



100



100



TYPE: Producer

NATURAL HISTORY: Larch is our only deciduous conifer. The needles turn bright yellow before they are shed for the winter.

1

SCOTS PINE

Pinus sylvestris



50



100



TYPE: Producer

NATURAL HISTORY: Once widespread in Britain, today Scots pine only naturally occurs in Scotland, and most trees in England come from plantings.

1

50



50



50



50



Corylus avellana, catkins, 'Cosford' by Rasbak available at [https://commons.wikimedia.org/wiki/Corylus_avellana#/media/File:Corylus_avellana_hazelnoot_%27Cosford%27_\(1\).jpg](https://commons.wikimedia.org/wiki/Corylus_avellana#/media/File:Corylus_avellana_hazelnoot_%27Cosford%27_(1).jpg) under CC BY-SA 3.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Fagales
Family: Betulaceae



Rumex obtusifolius by H. Zell available at https://commons.wikimedia.org/wiki/Rumex_obtusifolius#/media/File:Rumex_obtusifolius_001.JPG under CC BY-SA 3.0



Kingdom: Plantae
UGA: Angiosperms
UGB: Core eudicots
UGC: Caryophyllales
Order: Caryophyllales
Family: Polygonaceae



Chenopodium album by Hugo.arg available at https://commons.wikimedia.org/wiki/Chenopodium_album#/media/File:ChenopodiumAlbum001.JPG under GFDL



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Core eudicots
Order: Caryophyllales
Family: Chenopodiaceae



A tree in the Nature reserve Hainberg near Oberasbach, Bavaria, Germany by Simon Koopmann available at https://commons.wikimedia.org/wiki/Pinus_sylvestris#/media/File:Hainberg_20080707_0054.jpg under CC BY-SA 2.0 de



Kingdom: Plantae
UGA(Division): Pinophyta
UGB(Class): Pinopsida
UGC: Pinales
Order: Pinales
Family: Pinaceae



Two *Larix decidua* in Wilanów Palace Garden in Warsaw, Poland by Crusier available at https://commons.wikimedia.org/wiki/Larix_decidua#/media/File:Larix_decidua_tree_Wilan%C3%B3w.JPG under CC BY 3.0



Kingdom: Plantae
UGA(Division): Pinophyta
UGB(Class): Pinopsida
UGC: Pinales
Order: Pinales
Family: Pinaceae



Silberweide (*Salix alba*), Ort: Rheinauen bei Bingen, Rheinland-Pfalz, Deutschland by Willow available at https://commons.wikimedia.org/wiki/Salix_alba#/media/File:Salix_alba_019.jpg under CC BY 2.5



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Malpighiales
Family: Salicaceae



50



50



50



50

**HOLLY***Ilex aquifolium*

50



100



100

**TYPE:** Producer

NATURAL HISTORY: Holly has rich folklore in the British Isles. In England it is grown close to the house to keep witches away. In Ireland it is grown away from the house so as not to disturb the fairies who live in it.

1

SALLOW*Salix caprea*

200

**TYPE:** Producer

NATURAL HISTORY: Historically widely used as a browse for goats.

1

ELDER*Sambucus nigra*

100



100



200

**TYPE:** Producer

NATURAL HISTORY: Dead branches of this tree are the preferred habitat of the jelly-ear fungus (*Auricularia auricula-judae*).

1

EUROPEAN HARE*Lepus europaeus*

50



04

TYPE: Primary consumer

SPECIAL BEHAVIOUR: Group foraging allows for some individuals to be vigilant: if more than one of this card is on the table, all existing predators of the hare are discarded and the person(s) who had placed this predator card loses 2 points.

NATURAL HISTORY: Connection with Easter eggs was based on a misconception by the Europeans that lapwings laid their eggs in the hares' homes.

Grasses, herbs and field crops

2

EUROPEAN RABBIT*Oryctolagus cuniculus*

50



04

TYPE: Primary consumer

NATURAL HISTORY: Invasive species introduced from southwestern Europe to Britain.

Grasses, leaves, buds, tree bark, and roots

2

RED SQUIRREL*Sciurus vulgaris*

50



04

TYPE: Primary consumer

SPECIAL BEHAVIOUR: Solitary animal but in winter, several red squirrels may share a drey to keep warm: If more than one of the same card is present on the table, this particular card doubles in provided biomass.

NATURAL HISTORY: The red squirrel sheds its coat twice a year, switching from a thinner summer coat to a thicker, darker winter coat with noticeably larger ear-tuft.

Seeds of trees, fungi, nuts, berries, young shoots, bird eggs

2

50



50



50



50



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Salweide (Salix caprea), weibliche Kätzchen by Willow available at https://commons.wikimedia.org/wiki/Salix_caprea#/media/File:Salix_caprea_013.jpg under CC BY-SA 2.5

self made. Santiago de Compostela. Alameda by Luis Miguel Bugallo Sánchez available at https://commons.wikimedia.org/wiki/Ilex_aquifolium#/media/File:Acivro_Ilex_aquifolium.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Dipsacales
Family: Adoxaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Rosids
Order: Malpighiales
Family: Salicaceae

ECO-DIVO



Kingdom: Plantae
UGA: Angiosperms
UGB: Eudicots
UGC: Asterids
Order: Aquifoliales
Family: Aquifoliaceae

"Squirrel posing" by VS6507 available at https://upload.wikimedia.org/wikipedia/commons/1/1c/Squirrel_posing.jpg under CC BY 2.0

"Oryctolagus cuniculus Tasmania 2" by JJ Harrison available at https://en.wikipedia.org/wiki/European_rabbit#/media/File:Oryctolagus_cuniculus_Tasmania_2.jpg under CC BY-SA 3.0

"European Hare 2012-07-30 1" by Slaunger available at https://commons.wikimedia.org/wiki/Lepus_europaeus#/media/File:European_Hare_2012-07-30_1.JPG under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Rodentia
Family: Sciuridae

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Lagomorpha
Family: Leporidae

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Lagomorpha
Family: Leporidae

50



50



50



50



GREYLAG GOOSE

Anser anser



50 50

08

TYPE: Primary consumer

NATURAL HISTORY: This species is one of the last to migrate, and the "lag" portion of its name is said to derive from this lagging behind other geese.

Grass, roots, shoots, leaves, stems, seedheads and fruits

2

WATER VOLE

Arvicola terrestris



50 50

08

TYPE: Primary consumer

SPECIAL BEHAVIOUR: Adults mark their own territories with fecal latrines located near the nest or water edge where voles leave or enter the water: if there is an existing same card, that card is discarded and the person(s) who had placed that card loses 1 point.

NATURAL HISTORY: In the wild, on average, water voles only live about five months. Maximum longevity in captivity is 2 and a half years.

Grass and plants near water. At times, fruits, bulbs, twigs, buds, and roots

2

RED DEER

Cervus elaphus



100

08

TYPE: Primary consumer

SPECIAL BEHAVIOUR: Antlers (males only) and strong front-leg kicking action (both sexes) are defence mechanisms when attacked: When predated upon for the first time, the player who owns this 'red deer' card is able to move it to another pile and the predator card is discarded.

NATURAL HISTORY: Stags roar and grunt during the rut. Hinds bark when alarmed and moo when searching for their young.

Grass and shrubs

2

SMALL TORTOISESHELL

Aglais urticae



50 50

10

TYPE: Primary consumer

SPECIAL BEHAVIOUR: When disturbed, a group of larvae jerk their bodies from side to side in unison, a formidable sight to any predator: when more than one of this card is on the table, players with predators of this species in hand take an additional card.

NATURAL HISTORY: The larvae build a communal web, usually at the top of nettle, from which they emerge to bask and feed.

Common nettle (+1) and small nettle

2

BRIMSTONE

Gonepteryx rhamni



50 50

10

TYPE: Primary consumer

Common buckthorn and alder buckthorn

2

PEACOCK BUTTERFLY

Aglais io



50 50

10

TYPE: Primary consumer

SPECIAL BEHAVIOUR: Main anti-predator defense mechanism is the four large eyespots on its wings: Players wearing spectacles are to give one of his/her card to any other player.

NATURAL HISTORY: The Peacock male exhibits territorial behaviour, in many cases territories being selected en route of the females to oviposition sites.

Stinging Nettle, Hop, and the Small Nettle

2

50



50



50



50



"Red deer stag 2009 denmark" by AVRS available at https://upload.wikimedia.org/wikipedia/commons/5/50/Red_deer_stag_2009_denmark.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Artiodactyla
Family: Cervidae

"Greylag Goose - St James's Park, London - Nov 2006" by Diliff available at https://upload.wikimedia.org/wikipedia/commons/5/57/Greylag_Goose_-_St_James%27s_Park%2C_London_-_Nov_2006.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Aves
Order: Anseriformes
Family: Anatidae

"2014.04.12.-10-Kirschgartshaeuser Schlaege Mannheim-Tagpfauenauge" by Hockel available at https://commons.wikimedia.org/wiki/Aglais_io#/media/File:2014.04.12.-10-Kirschgartshaeuser_Schlaege_Mannheim-Tagpfauenauge.jpg under CC BY-SA 4.0

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Nymphalidae

"Sitrupunaperhonen (Gonepteryx rhamni)" by kallerna available at [https://commons.wikimedia.org/wiki/File:Sitrupunaperhonen_\(Gonepteryx_rhamni\).JPG](https://commons.wikimedia.org/wiki/File:Sitrupunaperhonen_(Gonepteryx_rhamni).JPG) under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Pieridae

"Small Tortoiseshell (Aglais urticae), Lichtenwalde, Germany" by Jörg Hempel available at https://commons.wikimedia.org/wiki/File:Aglais_urticae_LC0310.jpg under CC BY-SA 3.0 de

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Nymphalidae

50



50



50



50

**COMMA***Polygonia c-album*

50 50

10

TYPE: Primary consumer**NATURAL HISTORY:** The underside of the wings has small white 'C' shaped marking resembling a comma Hop, Common Nettle, Elm, and Blackcurrant; in other parts of its distribution it also feeds on Sallow, *Corylus avellana* and Birch

2

LARGE HEATH*Coenonympha tullia*

50 50

10

TYPE: Primary consumer**NATURAL HISTORY:** Those in the north have almost no spots at all with adults looking like a large Small Heath, while those in the south have very distinctive spots. The distinct eye spots deflect the bird's attention away from the body

Hare's-tail Cottongrass, Common Cottongrass and Jointed Rush

2

HOLLY BLUE*Celastina argiolus*

100 100

20

TYPE: Primary consumer**NATURAL HISTORY:** Widespread and common in England and Wales

Holly (+1), Ivy, Bramble, Dogwoods, Gorses, Snowberries, and Spindle

2

5-SPOT BURNET MOTH*Zygaena trifolii*

100 100

20

TYPE: Primary consumer**NATURAL HISTORY:** At the Broads and Coastal sites, notably Horsey area *Trifolium* and *Lathyrus* species

2

ORANGE-TIP*Anthocharis cardamines*

100 100

20

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** Orange tips of the male are warning colouration: each player wearing orange items get to place one card down at this particular time**NATURAL HISTORY:** Found throughout England, Wales and Ireland, but is somewhat-local further north and especially in Scotland

Cuckooflower (+1) and Garlic Mustard (+1 mainly), Charlock, Hairy Rock-cress, Hedge Mustard, Large Bitter-cress, Turnip and Winter-cress

2

SALLOW KITTEN MOTH*Furcula furcula*

150 150

30

TYPE: Primary consumer**NATURAL HISTORY:** The moth has two generations per year

Willow, birch and poplar

2

50



50



50



50



"Celastrina argiolus-02 (xndr)" by Svdmolen available at [https://commons.wikimedia.org/wiki/Celastrina_argiolus#/media/File:Celastrina_argiolus-02_\(xndr\).JPG](https://commons.wikimedia.org/wiki/Celastrina_argiolus#/media/File:Celastrina_argiolus-02_(xndr).JPG) under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Lycaenidae



"Common Ringlet (Coenonympha tullia)" by Ryan Hodnett available at [https://en.wikipedia.org/wiki/Coenonympha_tullia#/media/File:Common_Ringlet_\(Coenonympha_tullia\)_02.jpg](https://en.wikipedia.org/wiki/Coenonympha_tullia#/media/File:Common_Ringlet_(Coenonympha_tullia)_02.jpg) under CC BY-SA 4.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Nymphalidae



"2013.07.15.-6-Vogelstangsee Mannheim-C-Falter-Sommerform" by Hockel available at https://commons.wikimedia.org/wiki/Polygona_c_album#/media/File:2013.07.15.-6-Vogelstangsee_Mannheim-C-Falter-Sommerform.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Nymphalidae



"Furcula furcula" by Kurl Kulac available at https://commons.wikimedia.org/wiki/File:Furcula_furcula02.jpg under CC BY-SA 2.5



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Notodontidae



"Orange Tip butterfly (Anthocharis cardamines)" by Charlesjsharp available at [https://commons.wikimedia.org/wiki/File:Orange_Tip_butterfly_\(Anthocharis_cardamines\).JPG](https://commons.wikimedia.org/wiki/File:Orange_Tip_butterfly_(Anthocharis_cardamines).JPG) under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Pieridae



"Zygaenidae Widderchen Blutstropfchen 3271" by Dirk Beyer available at https://commons.wikimedia.org/wiki/Zygaena_trifolii#/media/File:Zygaenidae_Widderchen_Blutstropfchen_3271.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Zygaenidae



50



50



50



50

**GARDEN TIGER MOTH***Arctia caja*

150 150

30

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** If threat is perceived, the moth shows its hidden red colour on its hind wings and flies away: when predated upon for the first time, its predator card is discarded and the person(s) who had placed this predator card loses 2 points.**NATURAL HISTORY:** The moth is nocturnal and can usually only be seen flying around a source of light.

Raspberry, blackberry, viburnum, honeysuckle, erica, and broom.

2

RED-TAILED BUMBLE BEE*Bombus lapidarius*

100

10

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** All males patrol mating circuits and lay down a pheromone to attract new queens: when placed on the table, all other bumblebee cards in the hands of players have to be placed on the table. If there is no places for placement, the card is discarded.**NATURAL HISTORY:** Queen emerges from hibernation in spring and starts the colony by laying a few eggs that hatch as workers.

Daisies, dandelions and thistles

2

HONEY BEE*Apis mellifera*

100

10

TYPE: Primary consumer**NATURAL HISTORY:** Workers and queens are fed royal jelly during the first three days of larval stage. Workers are then switched to a diet of pollen and nectar, while queens will continue to receive royal jelly.

Flowers

2

LEAF-CUTTER BEE*Megachile centuncularis*

100

10

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** Females cut leaves to build nest: Eaten plant card(s) cannot be fed on by other organisms, if there are existing cards, they are returned to the respective players.

Flowers

2

CHERRY GALL WASP*Diplolepis quercusfolii*

200

20

TYPE: Primary consumer**NATURAL HISTORY:** Larvae exude a cocktail of chemicals that stimulate the cells of the tree to grow apple-like sphere around the egg, causing galls on oak leaves.

Plant sap

2

COMMON FROGHOPPER*Philaenus spumarius*

200

20

TYPE: Primary consumer**NATURAL HISTORY:** Nymphs live in frothy 'cuckoo spit' often found on cuckoo flowers.

Plant sap

2

50



50



25



25



"Apis mellifera Western honey bee" by Lämpel available at https://commons.wikimedia.org/wiki/Apis_mellifera#/media/File:Apis_mellifera_Western_honey_bee.jpg under CC BY-SA 2.5

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"Arctia caja Buchstein02" by Kulac available at https://en.wikipedia.org/wiki/Garden_tiger_moth#/media/File:Arctia_caja_Buchstein02.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Apidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Apidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Arctiidae

"Common froghopper (Philaenus spumarius)" by Sanja565658 available at https://commons.wikimedia.org/wiki/File:Philaenus_spumarius_02.JPG under CC BY-SA 3.0

"Eikennapjesgal Neuroterus albipes forma laeviusculus-levelsadjust-mask" by Rasback available at https://en.wikipedia.org/wiki/Gall_wasp#/media/File:Eikennapjesgal_Neuroterus_albipes_forma_laeviusculus-levelsadjust-mask.jpg under CC BY-SA 3.0

"Blattschneiderbiene Megachile centuncularis beim Anflug auf ihr Nest" by Bernhard Plank available at https://commons.wikimedia.org/wiki/File:BlattschneiderBiene_Megachile_centuncularis.jpg under CC BY-SA 2.5

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hemiptera
Family: Aphrophoridae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Cynipidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Megachilidae

25



25



25



25



GARDEN SNAIL

Helix aspersa



400

40

TYPE: Primary consumer

NATURAL HISTORY: Native of Europe but has been introduced in several parts of the world where it has become a pest for crops and gardens.

Fruit trees, garden plants, crop vegetables and some cereals

2

LARGE RED SLUG

Arion ater



300 100

40

TYPE: Primary consumer

SPECIAL BEHAVIOUR: Performs a rocking motion when disturbed: When first predated upon, the player first to rock has the opportunity to place down another card.

NATURAL HISTORY: Native to northwestern Europe.

Seedlings, fruits

2

BLACKBIRD

Turdus merula



20 50

04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Male defends its breeding territory by chasing away other males or using a "bow and run" threat display: When placed down, all other birds that are secondary consumers will be returned to the respective players.

NATURAL HISTORY: The only European country with no breeding blackbirds is Iceland; small numbers are present there during winter.

Insects, earthworms, berries, and fruits.

3

SLOW WORM

Anguis fragilis



40

04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Ability to shed their tails to escape predators: When first predated upon, any person should flip a coin and if it a head, the predator card is discarded.

NATURAL HISTORY: Not a worm by a limbless reptile native to Eurasia.

Slugs and worms

3

HOUSE SPARROW

Passer domesticus



40

04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Engages in social activities such as dust bathing and social singing: When placed on the table, all other house sparrow cards in the hands of players are to be placed on the table. If there are no places, the card is discarded.

NATURAL HISTORY: Highly successful in most parts of the world where it has been introduced due to its adaptation to living with humans and to a wide range of conditions.

Chiefly insects, of which beetles, caterpillars, dipteran flies, and aphids

3

ROBIN

Erythracus rubecula



30 25

04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Relatively unafraid of people and drawn to human activities involving the digging of soil, to look out for earthworms freshly turned up: when the 'Agriculture' event card is placed on the table, this card doubles in biomass provided.

NATURAL HISTORY: Only bird in Britain to be called exclusively by a "Christian" (human) name.

Terrestrial invertebrates, such as spiders, worms and insects, with berries and fruit.

3

25



25



25



25



Common blackbird by Merops available at https://commons.wikimedia.org/wiki/Turdus_merula#/media/File:Common_Blackbird.jpg under CC BY-SA 2.0



Kingdom: Animalia
Phylum: Chordata
Class: Aves
Order: Passeriformes
Family: Turdidae



"Svartskogsnegl" by Halvard available at https://commons.wikimedia.org/wiki/Arion_ater#/media/File:Svartskogsnegl.jpg under CC BY-SA 2.5



Kingdom: Animalia
Phylum: Mollusca
Class: Gastropoda
Order:
Family: Arionidae



"Common snail" by Diliif available at https://commons.wikimedia.org/wiki/Helix_aspersa#/media/File:Common_snail.jpg under CC BY 2.0



Kingdom: Animalia
Phylum: Mollusca
Class: Gastropoda
Order:
Family: Helicidae



Erithacus rubecula_with_cocked_head by Francis C. Franklin available at https://commons.wikimedia.org/wiki/File:Erithacus_rubecula_with_cocked_head.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Chordata
Class: Sauropsida
Order: Passeriformes
Family: Muscicapidae



Passer domesticus couple by Milvus-commonswiki available at https://commons.wikimedia.org/wiki/Passer_domesticus#/media/File:Passer_domesticus_couple.jpg under CC BY-SA 2.0



Kingdom: Animalia
Phylum: Chordata
Class: Sauropsida
Order: Passeriformes
Family: Passeridae



Anguidae by Svdmolen available at https://commons.wikimedia.org/wiki/Anguis_fragilis#/media/File:Anguidae.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Chordata
Class: Reptilia
Order: Squamata
Family: Anguidae



25



25



25



25

**GREAT TIT***Parus major*

20 25 50 04

TYPE: Secondary consumer**NATURAL HISTORY:** Build their nests in tree cavities and nest boxes and use mammal fur to make soft lining on their nests.

Insects and spiders, seeds

3

PIPISTRELLE BAT*Pipistrellus pipistrellus*

40 04

TYPE: Secondary consumer**NATURAL HISTORY:** Smallest bat found in Europe that preferentially lives in buildings, in the roof structure of houses; Locates prey by echolocation.

Insects

3

COMMON TOAD*Bufo bufo*

40 04

TYPE: Secondary consumer**NATURAL HISTORY:** Two subspecies that evolved during the last ice-age. After recolonising the north, the two sub-species are slightly incompatible.

Woodlice, slugs, beetles, caterpillars, flies, earthworms and even small mice

3

WEASEL*Mustela nivalis*

08 04

TYPE: Secondary consumer**NATURAL HISTORY:** Superstition in southern Greece that the least weasel had previously been a bride, who was transformed into a bitter animal which would destroy the wedding dresses of other brides out of jealousy.

Small rodents (+1) form the largest part of the least weasel's diet, but also eats rabbits and other mammals, and occasionally birds, birds' eggs, fish and frogs

3

MALLARD*Anas platyrhynchos*

20 25 50 04

TYPE: Secondary consumer**SPECIAL BEHAVIOUR:** Males sometimes forcibly mate with females whether or not they have a brood of ducklings: When two of these cards are on the table, its provided biomass is halved. Predators no longer supported are discarded and the person(s) who had placed this predator card loses 2 points.**NATURAL HISTORY:** Ancestor of most breeds of domestic ducks.

Gastropods, invertebrates, crustaceans, worms, many varieties of seeds and plant matter, and roots and tubers.

3

COMMON DORMOUSE*Muscardinus avellanarius*

20 25 50 04

TYPE: Secondary consumer**SPECIAL BEHAVIOUR:** If the weather is cold and wet, and food scarce, it saves energy by curling up into a ball and going to sleep: Resistant to any event card.**NATURAL HISTORY:** Live in older woodlands with well-developed understorey often linked by old hedge rows.

Berries and nuts leaves, and flowers aphids and caterpillars.

3

50



50



50



50



Kaefertaler Wald Mannheim-Erdkroete-Maennchen by Hoekei available at https://commons.wikimedia.org/wiki/Bufo_bufo#/media/File:2013.04.13.-04-Kaefertaler_Wald_Mannheim-Erdkroete-Maennchen.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Chordata
Class: Amphibia
Order: Anura
Family: Bufonidae



Pipistrellus flight2 by Barracuda1983 available at https://commons.wikimedia.org/wiki/Pipistrellus_pipistrellus#/media/File:Pipistrellus_flight2.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Chiroptera
Family: Vespertilionidae



Parus major poised by Baresi franco available at https://commons.wikimedia.org/wiki/Parus_major#/media/File:Parus_major_poised.jpg under CC BY-SA 4.0



Kingdom: Animalia
Phylum: Chordata
Class: Sauropsida
Order: Passeriformes
Family: Paridae



Haselmaus by Schwarz-schmidt available at https://en.wikipedia.org/wiki/Hazel_dormouse#/media/File:Haselmaus.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Rodentia
Family: Gliridae



Anas platyrhynchos male female quadrat by Weblars available at https://en.wikipedia.org/wiki/Mallard#/media/File:Anas_platyrhynchos_male_female_quadrat.jpg under CC BY-SA 2.5



Kingdom: Animalia
Phylum: Chordata
Class: Sauropsida
Order: Anseriformes
Family: Anatidae



Mustela nivalis -British Wildlife Centre-4 by Hohum available at https://en.wikipedia.org/wiki/Least_weasel#/media/File:Mustela_nivalis_-British_Wildlife_Centre-4.jpg under CC BY-SA 2.0



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae



04



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04

**COMMON HEDGEHOG***Erinaceus europaeus*

20 04

04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: If alarmed, it rolls into a ball to protect itself. When first predated upon, if the player who has placed the prey card curls up within 5 seconds, the predator card is returned to the owner.**NATURAL HISTORY:** A favourite in European gardens, both for its endearing appearance and its eating of a range of garden pests.

Slugs, earthworms, insects; grass snakes, vipers, frogs, fish, small rodents, young birds and birds' eggs

3

STOAT*Mustela erminea*

20 04

04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Does not dig its own burrows, but uses burrows and nest chambers of the rodents it kills: All existing rodent cards are returned to their respective players. Predators no longer supported are discarded and the person(s) who had placed this predator card loses 2 points.**NATURAL HISTORY:** Introduced into New Zealand to control rabbits in the late 19th century, and have had a devastating effect on native bird populations.

Mouse-like rodents; birds, fish, and shrews and, more rarely, amphibians, lizards, and insects.

3

COMMON MOLE*Talpa europaea*

40

04

TYPE: Secondary consumer

NATURAL HISTORY: Found to spend a lot of time at the sides of drainage lines and streams but do not inhabit flooded or dry soils.

Mainly on earthworms (+1), but also on insects, centipedes and even mice and shrews.

3

GARDEN SPIDER*Araneus diadematus*

20

10

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Occasionally, the female will eat the male directly after mating: When two of these cards are present on the table, its provided biomass is halved. Predators that are no longer supported will be discarded and the person(s) who had placed this predator card loses 2 points.**NATURAL HISTORY:** Markings on the abdomen are formed in cells filled with guanine, which is a byproduct of protein metabolism.

Insects

3

LACEWING*Chrysoperla carnea*

100 10

10

TYPE: Secondary consumer

NATURAL HISTORY: Used in the biological control of insect pests on crops.

Nectar, pollen and aphid honeydew, larvae feeds on aphids (+1) mealybug

3

SOUTHERN HAWKER DRAGONFLY*Aeshna cyanea*

20

10

TYPE: Secondary consumer

NATURAL HISTORY: Emerge as adults in July and August after three years' development; Eggs are laid by jabbing the abdomen into rotting vegetation or wood.

The adult eats various insects, caught on the wing. The nymphs feed on aquatic insects, tadpoles and small fish

3

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Talpa europaea MHNT by Archaeodontosaurus available at https://commons.wikimedia.org/wiki/Talpa_europaea#/media/File:Talpa_europaea_MHNT.jpg under CC BY-SA 4.0

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ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Soricomorpha
Family: Talpidae

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Erinaceomorpha
Family: Erinaceidae

Southern Hawker Dragonfly Bavaria Germany by Ebertakis available at https://en.wikipedia.org/wiki/Southern_hawker#/media/File:Southern_Hawker_Dragonfly_Bavaria_Germany.jpg under CC BY-SA 3.0

Chrysoperla carnea 01 by BeracommandBor available at https://commons.wikimedia.org/wiki/Chrysoperla_carnea#/media/File:Chrysoperla_carnea_01.jpg under CC BY-SA 3.0

Araneus diadematus_(aka) by Aka available at [https://commons.wikimedia.org/wiki/File:Araneus_diadematus_\(aka\).jpg](https://commons.wikimedia.org/wiki/File:Araneus_diadematus_(aka).jpg) under CC BY-SA 2.5

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Odonata
Family: Aeshnidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Neuroptera
Family: Chrysopidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Arachnida
Order: Araneae
Family: Araneomorphae

04



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COMMON BLUE DAMSELFLY

Enallagma cyathigerum



20

10

TYPE: Secondary consumer

NATURAL HISTORY: The mating position is called a mating wheel where the male clasps the female by her neck while her body is bent around to his reproductive organs.

Small aquatic animals

3

HARVESTMEN

Phalangium opilio



20

10

TYPE: Secondary consumer

NATURAL HISTORY: Unlike spiders, the two body sections of harvestmen are broadly joined and no web spinning organs are present.

Soft-bodied animals such as aphids, caterpillars, leafhoppers, beetle larvae, mites, slugs, etc. Also known to scavenge on various arthropods, including hard-bodied animals.

3

SEVENSPOT LADYBIRD

Coccinella septempunctata



20

10

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: A threatened ladybug may both play dead and secrete the unappetising substance to protect itself: When first predated upon, this predator card can be moved to another prey.

NATURAL HISTORY: Its elytra are of a red colour, punctuated with three black spots each, and a further spot at the junction of the two, making a total of seven spots.

Aphids

3

COMMON WASP

Vespa vulgaris



100 10

10

TYPE: Secondary consumer

NATURAL HISTORY: Its excellent adaptation skill makes it possible to live in a wide range of habitats; its activities pose a great threat to people.

Caterpillars to feed their developing larvae; adults feed on carbohydrates, such as nectar and sweet fruits

3

HORNET

Vespa crabro



20

10

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: An alarm dance is performed outside of the nest with consistent buzzing, darting in and out of the nest, and attacking or approaching the target of the alarm pheromone: when first predated upon, this predator card is given to the player on the left.

NATURAL HISTORY: In North America it is restricted to Sphagnum bogs and marshes, but found in open forest habitats in Europe and Palearctic.

Large insects: primarily wasps, large moths, and other large bees.

3

WOODPIGEON

Columba palumbus



20 50 50 04

TYPE: Secondary consumer

NATURAL HISTORY: The young swiftly become fat, as a result of the crop milk they are fed by their parents.

Leaves, young shoots, seedlings, grain, pine nuts, certain fruits and berries; larvae, ants, and small worms.

3

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7-Spotted-Ladybug-Coccinella-septempunctata-sq1 by MathKnight available at https://en.wikipedia.org/wiki/Coccinella_septempunctata#/media/File:7-Spotted-Ladybug-Coccinella-septempunctata-sq1.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Coleoptera
Family: Coccinellidae



Phalangium opilio MHNT Face by Archaeodontosaurus available at https://en.wikipedia.org/wiki/Phalangium_opilio#/media/File:Phalangium_opilio_MHNT_Face.jpg under CC BY-SA 4.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Arachnida
Order: Opiliones
Family: Phalangidae



Enallagma cyathigerum 14(loz) by Loz available at [https://en.wikipedia.org/wiki/Enallagma_cyathigerum#/media/File:Enallagma_cyathigerum_14\(loz\).jpg](https://en.wikipedia.org/wiki/Enallagma_cyathigerum#/media/File:Enallagma_cyathigerum_14(loz).jpg) under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Odonata
Family: Coenagrionidae



Columba palumbus -garden post-8 by Bor available at https://en.wikipedia.org/wiki/Common_wood_pigeon#/media/File:Columba_palumbus_-garden_post-8.jpg under CC BY-2.0



Kingdom: Animalia
Phylum: Chordata
Class: Aves
Order: Columbiformes
Family: Columbidae



Vespa crabro-dorsal by NW-commonswiki available at https://en.wikipedia.org/wiki/European_hornet#/media/File:Vespa_crabro-dorsal.jpeg under CC BY-SA 2.5



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Vespidae



Flying Vespula vulgaris by Soebe available at https://en.wikipedia.org/wiki/Vespula_vulgaris#/media/File:Flying_Vespula_vulgaris.jpg under CC BY-SA 3.0



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Vespidae



04



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**COMMON RED ANT***Myrmica rubra*

10 100

10

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Aggressive and use stingers: all predators consuming this species provide half its biomass.**NATURAL HISTORY:** Because of their hydrocarbons on their cuticle, most ants taste like mint, cinnamon or lemon.

Honeydew excreted by aphids (+1); insects and invertebrates; pollen

3

ZEBRA JUMPING SPIDER*Salticus scenicus*

20

10

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: They glue a silk thread to the surface that they are jumping from so that if they miss the target, they can climb up the thread and try again: Place an additional card down.**NATURAL HISTORY:** Upon noticing someone observing them, they can be seen raising their head, and usually change behavior. Hence the name *Salticus scenicus*, theatrical jumper.

Insects or spiders

3

ADDER*Vipera berus*

08 10

04

TYPE: Top predator

NATURAL HISTORY: Females breed once every two or three years, with litters usually being born in late summer to early autumn in the Northern Hemisphere.**SUSCEPTIBILITY:** Pet trade, fragmentation, habitat reductions, collection for venom extraction.

Small mammals, birds, lizards, and amphibians, and in some cases on spiders, worms, and insects

4

SPARROWHAWK*Accipiter nisus*

08

04

TYPE: Top predator

SPECIAL BEHAVIOUR: It waits hidden for birds to come near, then breaks cover and flies out fast and low: When used for the first time, if that player is able to surprise one other player, he/she can place an additional card down.**NATURAL HISTORY:** Prevalent in most woodland types throughout the temperate and subtropical parts of the Old World.**SUSCEPTIBILITY:** Insecticide pollution, human conflicts, captured for falconry

Tits, finches, and sparrows; females catch primarily thrushes and starlings

4

BARN OWL*Tyto alba*

08 10

04

TYPE: Top predator

SPECIAL BEHAVIOUR: With acute hearing, this species locates prey by sound: When played for the first time in a game, the player who first utters a sound after this card is placed on the table will have to take an additional card from the 'other' pile.**NATURAL HISTORY:** Contrary to popular belief, the barn owl does not hoot.

Mice, rats, bats and birds are also taken, as well as lizards, amphibians and insects

4

RED FOX*Vulpes vulpes*

16

08

TYPE: Top predator

NATURAL HISTORY: Its range has increased alongside human expansion, having been introduced to Australia, where it is considered harmful to native mammals and bird populations.

Voles, mice, ground squirrels, hamsters, gerbils, woodchucks, pocket gophers and deer mice.

4

04



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ECO-DIVO

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ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Reptilia
Order: Squamata
Family: Viperidae



Kingdom: Animalia
Phylum: Arthropoda
Class: Arachnida
Order: Araneae
Family: Salticidae



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Formicidae

Barn Owl West Acre 2 by MPF available at https://commons.wikimedia.org/wiki/Tyto_alba#/media/File:Barn_Owl_West_Acre_2.jpg under CC BY 2.0

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ECO-DIVO

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Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Canidae



Kingdom: Animalia
Phylum: Chordata
Class: Aves
Order: Strigiformes
Family: Tytonidae



Kingdom: Animalia
Phylum: Chordata
Class: Aves
Order: Accipitriformes
Family: Accipitridae

04



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**BADGER***Meles meles*

12 10

08

TYPE: Top predator**NATURAL HISTORY:** The spread of bovine tuberculosis has been attributed to badgers, however recent peer reviewed reports state that the issue is more to do with cattle management.**SUSCEPTIBILITY:** Rabies, habitat loss, hunted as pest reductions, collection for venom extraction

Earthworms, large insects, small mammals, carrion, cereals and root tubers

4

SCOTTISH WILD CAT*Felis sylvestris*

16

08

TYPE: Top predator**SPECIAL BEHAVIOUR:** Leave scent by rubbing glands in their cheeks and tail against objects: If there is another Scottish wild cat card on the table, that card is discarded and the person who had placed that card loses 2 points.**NATURAL HISTORY:** Unique to Britain, and now only found in Scotland.**SUSCEPTIBILITY:** Deforestation, hybridisation with domestic cats

Rabbits, rats, hare and other small mammals.

4

ELDER EAR FUNGUS*Auricularia auricula-judae*

100

TYPE: Decomposer and scavenger**EFFECT:** Doubles productivity of the producer card(s) that this species feeds on**NATURAL HISTORY:** Commonly used in Chinese cuisine. In English sometimes called the Jew's ear fungus, possibly due to the old expression for mushrooms being called Jew's meat.

Elder mostly (+2), beech, ash, spindle

2

CEP (KING BOLETE) MUSHROOM*Boletus edulis*

100

TYPE: Decomposer and scavenger**SPECIAL BEHAVIOUR:** Forms symbiotic associations with living trees by enveloping tree's underground roots with fungal tissue.**EFFECT:** Doubles productivity of the producer card(s) that this species feeds on**NATURAL HISTORY:** Edible mushroom held in high regard in many cuisines; commonly eaten in soups, pasta, or risotto.

Grows in areas dominated by pine, spruce, hemlock and fir

2

HONEY FUNGUS*Armillaria mellea*

100

TYPE: Decomposer and scavenger**EFFECT:** Doubles productivity of the producer card(s) that this species feeds on**NATURAL HISTORY:** Causes roots to rot

Trees

2

COMMON EARTHWORM*Lumbricus terrestris*

200 10 04 10

TYPE: Decomposer and scavenger**NATURAL HISTORY:** Pull leaves into the mouth of its burrow where they partially decay before being eaten.

Plant material, dead insects and faeces

2

04



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Auricularia auricula-judae 64485 by J Milburn available at https://en.wikipedia.org/wiki/Auricularia_auricula-judae#/media/File:Auricularia_auricula-judae_64485.JPG under CC BY-SA 3.0

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ECO-DIVO

ECO-DIVO

ECO-DIVO



Kingdom: Fungi
Phylum: Basidiomycota
Class: Agaricomycetes
Order: Auriculariales
Family: Auriculariaceae



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Felidae



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae

Lumbricus terrestris by James K. Lindsey available at https://commons.wikimedia.org/wiki/File:Lumbricus_terrestris.jpg under CC BY-SA 2.5

Armillaria mellea, Honey Fungus, UK 1 by Stu's images available at https://en.wikipedia.org/wiki/Armillaria_mellea#/media/File:Armillaria_mellea,_Honey_Fungus,_UK_1.jpg under CC BY-SA 3.0

Boletus edulis EtgHollande 041031 091 by Strobilomyces available at https://en.wikipedia.org/wiki/Boletus_edulis#/media/File:Boletus_edulis_EtgHollande_041031_091.jpg under CC BY-SA 3.0

ECO-DIVO

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ECO-DIVO



Kingdom: Animalia
Phylum: Annelida
Class: Clitellata
Order: Haplotaxida
Family: Lumbricidae



Kingdom: Fungi
Phylum: Basidiomycota
Class: Agaricomycetes
Order: Agaricales
Family: Physalacriaceae



Kingdom: Fungi
Phylum: Basidiomycota
Class: Agaricomycetes
Order: Boletales
Family: Boletaceae

04



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**BURYING BEETLE***Nicrophorus vespilloides*

08



20

TYPE: Decomposer and scavenger**NATURAL HISTORY:** Female lays her eggs on or beside the buried body and the resulting larvae eat the rotting corpse.

Dead animals

2

BLUE BOTTLE*Calliphora vomitoria*

100



04



20

TYPE: Decomposer and scavenger**SPECIAL BEHAVIOUR:** If one fly detects food, it will disperse a pheromone which will alert the others to the meal: When used, other players have to place down the same cards if they have any.**NATURAL HISTORY:** The chest is bright purple and has spikes to protect themselves against other flies.

Adults feed on nectar, larvae feed on carcasses

2

COMMON HOUSEFLY*Musca domestica*

100



04



20

TYPE: Decomposer and scavenger**SPECIAL BEHAVIOUR:** Deposits faeces constantly, transmitting diseases: all predators consuming this species will provide 1 less bone or 3 less invertebrate.**NATURAL HISTORY:** Most common of all domestic flies, accounting for about 91% of all flies in human habitats.

Dead or decaying plant or animal material

2

USE OF CHEMICAL FERTILIZERS**TYPE:** Event**DESCRIPTION:** Increases growth of plants but the breakdown product, nitrates contaminates groundwater and inhibit growth of other crops**EFFECT:** Place next to a plant to double its provided biomass but halve the provided biomass of another selected plant. Secondary consumers and predators that are no longer supported are discarded. If two cards are directly dependable on a affected consumer, the later card(s) is/are removed**USE OF CHEMICAL PESTICIDES****TYPE:** Event**DESCRIPTION:** Removes unwanted pests but also kills beneficial insects**EFFECT:** Place next to a plant to halve the provided biomass of its direct consumer. Secondary consumers and predators that are not supported are discarded. If two cards are directly dependable on this affected consumer, the later card(s) is/are removed**SELECTIVE LOGGING****TYPE:** Event**DESCRIPTION:** Practice of cutting down one or two species of trees or trees of certain width while leaving the rest intact**EFFECT:** Place next to a tree card to temporarily block linked consumers and predators for two rounds, meaning no other cards can be placed on blocked and linked cards

10



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Calliphora vomitoria edit by Papa Lima Whiskey available at https://en.wikipedia.org/wiki/Blue_bottle_fly#/media/File:Calliphora_vomitoria_edit.jpg under CC BY-SA 3.0

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ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Diptera
Family: Muscidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Diptera
Family: Calliphoridae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Coleoptera
Family: Silphidae

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Lite-trac Spread by Ana Bykova available at https://en.wikipedia.org/wiki/Fertilizer#/media/File:Lite-trac_Spreader.jpg under CC BY-SA 3.0

ECO-DIVO



ECO-DIVO



ECO-DIVO



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DEFORESTATION



TYPE: Event

DESCRIPTION: Removing a large area of the forest

EFFECT: Place next to a tree card to halve its provided biomass, consumers and predators that are not supported are discarded. If two cards are directly dependable on this tree, the later card(s) is/ are removed

SEED BANKS



TYPE: Event

DESCRIPTION: Stores seeds in a storage in case existing seed reserves are depleted

EFFECT: Place next to any plant card to makes it resistant to any special behaviour or any other event card. is does not neutralise effects of existing event cards on the table.

Placing this card does not use up your turn: you can place down an additional card.

REFORESTATION



TYPE: Event

DESCRIPTION: Restocking of existing forests that have been depleted

EFFECT: Place next to a tree card to double its provided biomass. This card can neutralise the effects of deforestation.

Placing this card does not use up your turn: you can place down an additional card.

PROTECTION OF UMBRELLA SPECIES



TYPE: Event

DESCRIPTION: Protecting umbrella species indirectly protects the many other species that make up the ecological community of its habitat.

EFFECT: Place next to predator cards to makes all species linked linearly to this card resistant to any special behaviour or any other events. This does not neutralise effects of existing event cards on the table.

Placing this card does not use up your turn: you can place down an additional card.

PROTECTED AREAS



TYPE: Event

DESCRIPTION: Areas that receive protection because of its recognized natural, ecological and/ or cultured value

EFFECT: Place next to any producer card and any linearly linked cards are resistant to special behaviours and special event cards. This does not neutralise effects of existing event cards on the table.

Placing this card does not use up your turn: you can place down an additional card.

OVERHUNTING



TYPE: Event

DESCRIPTION: Adverse effect on hunted species

EFFECT: Place next to a mammal card to halve its provided biomass, consumers and predators that are not supported are discarded. If two cards are directly consuming this mammal, the later card(s) is/are removed

10



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ECO-DIVO

ECO-DIVO

ECO-DIVO



Safety instructions on Lone Ranch Beach by Adbar available at https://en.wikipedia.org/wiki/Protected_area#/media/File:Safety_instructions_on_Lone_Ranch_Beach.JPG under CC BY-SA 3.0

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ECO-DIVO

ECO-DIVO

ECO-DIVO



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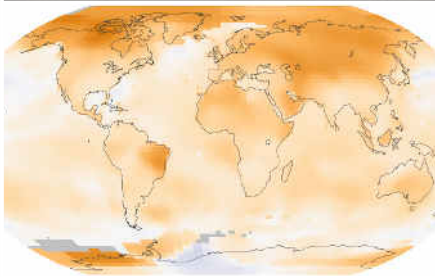
10



10



GLOBAL WARMING



TYPE: Event

DESCRIPTION: Gradual increase in temperature of the Earth's atmosphere and its ocean

EFFECT: Place next to any animal card to discard it and any higher trophic cards linked to affected card

GENETIC MODIFICATION OF PLANTS



TYPE: Event

DESCRIPTION: Manipulation of genes for various purposes as such increased yield or resistance to pests

EFFECT: Place next to a plant to double or halve its provided biomass. Secondary consumers and predators that are no longer supported are discarded. If two cards are directly dependable on this affected consumer, the later card(s) is/are removed

EDUCATION

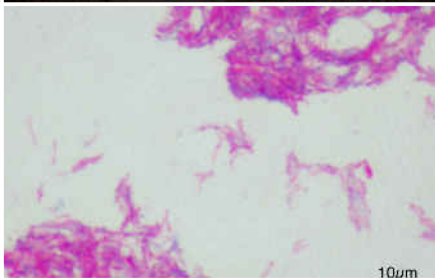


TYPE: Event

DESCRIPTION: Can create awareness on conservation issues

EFFECT: Place next to any special event card that has negative impacts to neutralise its effects
Placing this card does not use up your turn: you can place down an additional card.

DISEASE SPREAD IN AN ANIMAL SPECIES



TYPE: Event

DESCRIPTION: This can be detrimental to an entire species

EFFECT: Discard any animal card, predators that are not supported are discarded. If two cards are directly dependable on this animal, the later card(s) is/are removed

CATTLE REARING



TYPE: Event

DESCRIPTION: Extensive livestock production can lead to deforestation for grazing land

EFFECT: Place next to a producer card to halve its provided biomass, consumers and predators that are not supported are discarded. If two cards are directly dependable on this tree, the later card(s) is/are removed

CAPTIVE BREEDING AND REINTRODUCTION



TYPE: Event

DESCRIPTION: Breeding animals in controlled conditions and and the release into the wild

EFFECT: Place next to any animal card to double its provided biomass
Placing this card does not use up your turn: you can place down an additional card.

10



10



10



10



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ECO-DIVO

ECO-DIVO

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Mycobacterium bovis BCG ZN by Y tambe available at https://en.wikipedia.org/wiki/Badger_culling_in_the_United_Kingdom#/media/File:Mycobacterium_bovis_BCG_ZN.jpg under CC BY-SA 3.0

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BOTANICAL GARDENS



TYPE: Event

DESCRIPTION: Can educate the public on plants

EFFECT: Place next to any special event card that has negative impacts on plants to neutralise its effects.

Placing this card does not use up your turn: you can place down an additional card.

UNSUSTAINABLE AGRICULTURE



TYPE: Event

DESCRIPTION: Can lead to deforestation, pollution and soil erosion

EFFECT: Place next to a tree card to halve its provided biomass, consumers and predators that are not supported are discarded. If two cards are directly dependant on this tree, the later card(s) is/ are removed

BADGER CULL



TYPE: Event

DESCRIPTION: Killing of the badger because of the belief that it spreads bovine tuberculosis

EFFECT: Place next to the badger card to halve its provided biomass. Predators that are not supported are discarded. If two cards are directly consuming the badger, the later card(s) is/are removed

LIGHT POLLUTION



TYPE: Event

DESCRIPTION: Attracts insects out of natural environment

EFFECT: Place next to flying insect cards to halve its provided biomass. Secondary consumers and predators that are no longer supported are discarded. If two cards are directly dependant on a affected consumer, the later card(s) is/are removed

ECO GAME PLAY

AIM: Gain points stated on the card by placing cards in hand onto the table. Highest number of points win. This educational game allows for 2-5 players.

HOW TO PLAY:

1. Arrange the cards into two decks: one for producers, and one for all other card types. Shuffle each deck separately and distribute 4 producer cards and 7 'other' cards to each player. You are able to see your own cards. Have a coin as part of the game.
2. The person to the left of the dealer starts by placing down one card facing himself/herself. Tabulate your points (bottom right of card) on a score sheet.
3. Take turns in a clockwise manner, placing one card down facing oneself. Use arrow(s) to indicate how much is consumed. Cards on the table can be shifted but should still face the persons who have placed them. Consumer/decomposer card can only be placed if there is sufficient biomass of the lower trophic level.
4. When no cards can be played, either draw an additional card from any pile or exchange all your cards and draw two additional cards from any pile.
5. The game ends when one player finishes all his/her card or after 45 min if time is limited. Tabulate your points to find out who is the winner!

DIVO GAME PLAY

AIM: Group your cards to the highest specificity possible given the initiated card(s). For example, higher points are scored if the played card belongs to the same 'genus' as the initiated card than if the played card belongs to the same 'family' as the initiated card. This educational game allows for 2-5 players.

1. There are two decks for each set. One for producers, and one for everything else. Remove all event cards. Shuffle and distribute to each player 5 producer cards and 7 'other' cards. You are able to see their own cards on the side with the picture but cannot turn the cards to see the back.
2. Take the top 4 cards from the undistributed pile and place them on the table. These are the initiator cards.
3. The person to the left of the dealer plays first. Take turns in a clockwise manner to either place one card from your hand that belongs to the same group as any initiator cards or discard one of your card to take a new card from the undistributed pile. Use a pencil to tabulate your scores on the score sheet. You cannot play the same card as the initiator card.
4. After all players have gone through two turns, pick

10 

10 

10 

10 

10 

10 

10 

10 

ECO-DIVO

ECO-DIVO

ECO-DIVO



another initiator card from the undistributed pile and continue play.

- The game ends when one player finishes all his/her card. The game can also end after 45 min if the tutor has limited time.
- At the end of the game, the cards are turned over to verify the classification. Relative to the initiated card, If the played card belongs to the same group below, the points awarded are as follows:

- Kingdom: 1
- Phylum/UGA: 2
- Class/UGB: 3
- UGC: 4
- Order: 5
- Family: 6
- Not the same Kingdom: 0

Note: UGA means Unranked Group A and so forth

Created by Cedric Tan, Ada Grabowska, David Pigot and Alison Poole, University of Oxford

www.wildcru.org/members/dr-cedric-kai-wei-tan/

Designed by Celeste Tan
www.be.net/celesteazuretan

An educational game commissioned by the Association for the Study of Animal Behaviour (ASAB) Education Committee
www.asab.org/education

Please note:

- When played event cards result in existing cards being discarded, the persons who have placed these existing cards will incur a penalty of -1 point for each card discarded.
- Bonus points, indicated by (+1) in the diet section, can be earned if card is matched with the specific diet.
- Some cards have special behaviour and their effects are stated on the card itself.
- When the biomass is halved or doubled, place the circular discs on top of the card.
- Top predators cannot be eaten by any consumers and secondary consumers cannot be eaten by primary consumers.

Stand to win an ASAB USB stick by giving us feedback at this website:
<https://goo.gl/BZKcXr>

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ECO-DIVO



CARD LABELS

NAME OF GAME

ECO-DIVO

ABSTRACT VERSION OF FOOD WEB

ASAB LOGO



CLASSIFICATION

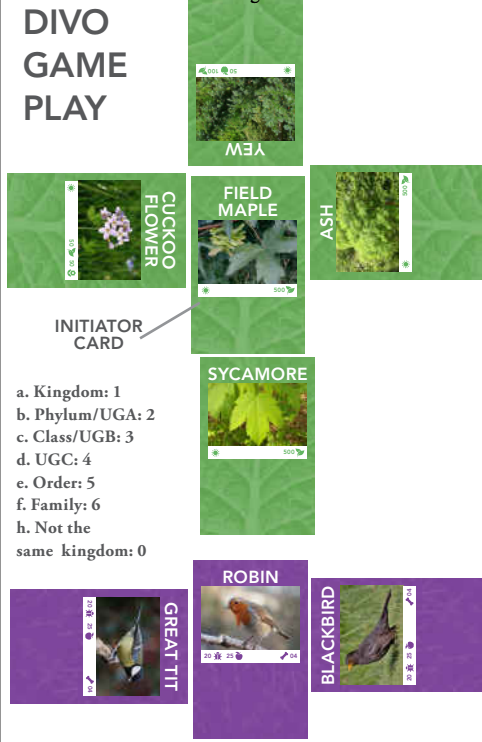
Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Nymphalidae

Stand to win an ASAB USB stick by giving us feedback at this website: <https://goo.gl/BZKcXr>

An educational game commissioned by the Association for the Study of Animal Behaviour (ASAB) Education Committee www.asab.org/education

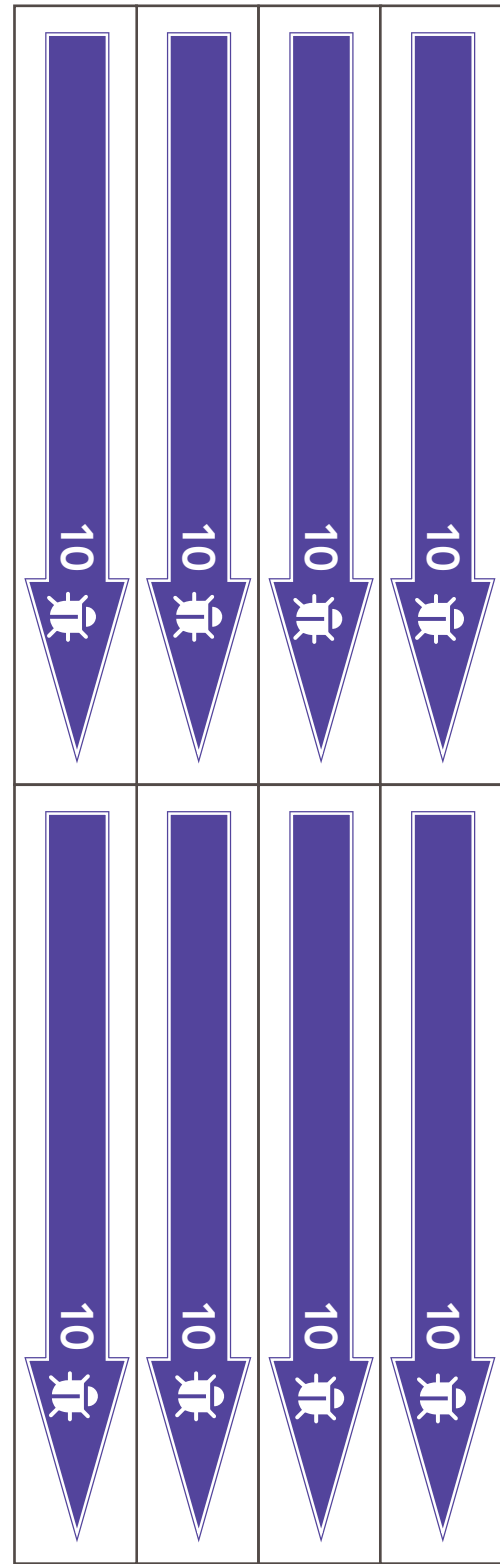
www.asab.org/education

DIVO GAME PLAY



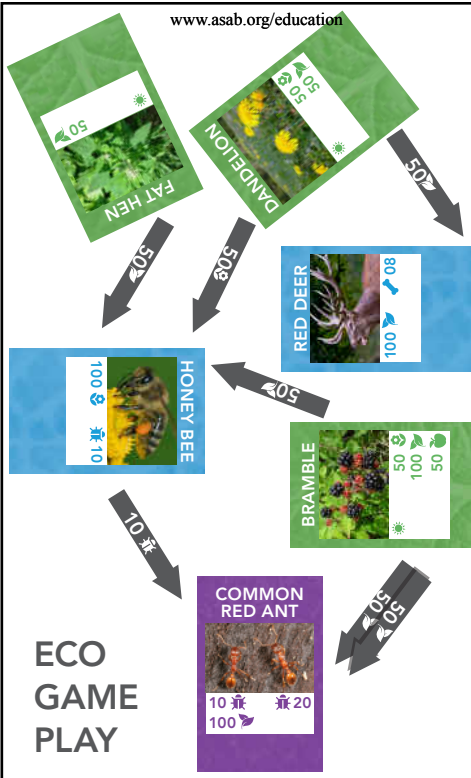
INITIATOR CARD

- a. Kingdom: 1
- b. Phylum/UGA: 2
- c. Class/UGB: 3
- d. UGC: 4
- e. Order: 5
- f. Family: 6
- h. Not the same kingdom: 0



1/2	2	1/2	2
1/2	2	1/2	2
1/2	2	1/2	2
1/2	2	1/2	2
1/2	2	1/2	2
1/2	2	1/2	2

1/2	2
1/2	2



ECO GAME PLAY

COMMON NAME: PEACOCK BUTTERFLY
Aglais io

SPECIES NAME: (Same as Common Name)

AMOUNT NEEDED: 50 (Leaf), 50 (Flower), 10 (Invert)

SPECIAL BEHAVIOUR: For game play
 TYPE: Primary consumer
 SPECIAL BEHAVIOUR: Main anti-predator defense mechanism is the four large eyespots on its wings. Players wearing spectacles are to give one of his/her card to any other player.

NATURAL HISTORY: The Peacock male exhibits territorial behaviour, in many cases territories being selected en route of the females oviposition sites.
 Singing Nettle, Hop, and the Small Nettle

DIET OR HABITATS: (Linked to icons)

AMOUNT GIVEN: 2 (Points)

POINTS AWARDED: 2

CARD LABELS

- Invert
- Leaf
- Fruit
- Sunlight
- Bone
- Flower
- Seeds

10



10



10



10

**COMMON NETTLE APHID***Microlophium carnosum*

200

20

TYPE: Primary consumer**NATURAL HISTORY:** Sexual stage in autumn with eggs laid near the base of the nettle stem, in mild winters asexual reproduction gives identical individuals.

Feeds on stinging nettle (+1)

2

WATER VOLE*Arvicola terrestris*

50 50

08

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** Adults mark their own territories with fecal latrines located near the nest or water edge where voles leave or enter the water: if there is an existing same card, that card is discarded and the person(s) who had placed that card loses 1 point.**NATURAL HISTORY:** In the wild, on average, water voles only live about five months. Maximum longevity in captivity is 2 and a half years.

Grass and plants near water. At times, fruits, bulbs, twigs, buds, and roots

2

FALSE OIL BETTLE*Oedemera nobilis*

100

10

TYPE: Primary consumer**NATURAL HISTORY:** Both the males and females are a vivid metallic green colour all over. They look as if their wing covers (elytra) have shrunk in the wash because they don't quite meet in the middle.

Pollen

2

EUROPEAN HARE*Lepus europaeus*

50

04

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** Group foraging allows for some individuals to be vigilant: if more than one of this card is on the table, all existing predators of the hare are discarded and the person(s) who had placed this predator card loses 2 points.**NATURAL HISTORY:** Connection with Easter eggs was based on a misconception by the Europeans that lapwings laid their eggs in the hares' homes.

Grasses, herbs and field crops

2

RED SQUIRREL*Sciurus vulgaris*

50

04

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** Solitary animal but in winter, several red squirrels may share a drey to keep warm: If more than one of the same card is present on the table, this particular card doubles in provided biomass.**NATURAL HISTORY:** The red squirrel sheds its coat twice a year, switching from a thinner summer coat to a thicker, darker winter coat with noticeably larger ear-tuft.

Seeds of trees, fungi, nuts, berries, young shoots, bird eggs

2

SMALL TORTOISESHELL*Aglais urticae*

50 50

10

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** When disturbed, a group of larvae jerk their bodies from side to side in unison, a formidable sight to any predator: when more than one of this card is on the table, players with predators of this species in hand take an additional card.**NATURAL HISTORY:** The larvae build a communal web, usually at the top of nettle, from which they emerge to bask and feed.

Common nettle (+1) and small nettle

2

10



10



10



10



"Oedemera nobilis" by Entomart Available at https://commons.wikimedia.org/wiki/File:Oedemera_nobilis02.jpg

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Coleoptera
Family: Oedemeridae

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Rodentia
Family: Cricetidae

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hemiptera
Family: Aphididae

"Small Tortoiseshell (Aglais urticae), Lichtenwalde, Germany" by Jörg Hempel available at https://commons.wikimedia.org/wiki/File:Aglais_urticae_LC0310.jpg under CC BY-SA 3.0 de

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Lepidoptera
Family: Nymphalidae

"Squirrel posing" by VS6507 available at https://upload.wikimedia.org/wikipedia/commons/1/1c/Squirrel_posing.jpg under CC BY 2.0

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Rodentia
Family: Sciuridae

"European Hare 2012-07-30 1" by Slaunger available at https://commons.wikimedia.org/wiki/Lepus_europaeus#/media/File:European_Hare_2012-07-30_1.JPG under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Lagomorpha
Family: Leporidae

10



10



10



10

**RED-TAILED BUMBLE BEE***Bombus lapidarius*

100

10

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** All males patrol mating circuits and lay down a pheromone to attract new queens: when placed on the table, all other bumblebee cards in the hands of players have to be placed on the table. If there is no places for placement, the card is discarded.**NATURAL HISTORY:** Queen emerges from hibernation in spring and starts the colony by laying a few eggs that hatch as workers.

Daisies, dandelions and thistles

2

LEAF-CUTTER BEE*Megachile centuncularis*

100

10

TYPE: Primary consumer**SPECIAL BEHAVIOUR:** Females cut leaves to build nest: Eaten plant card(s) cannot be fed on by other organisms, if there are existing cards, they are returned to the respective players.

Flowers

2

CHERRY GALL WASP*Diplolepis quercusfolii*

200

20

TYPE: Primary consumer**NATURAL HISTORY:** Larvae exude a cocktail of chemicals that stimulate the cells of the tree to grow apple-like sphere around the egg, causing galls on oak leaves.

Plant sap

2

GARDEN SNAIL*Helix aspersa*

400

40

TYPE: Primary consumer**NATURAL HISTORY:** Native of Europe but has been introduced in several parts of the world where it has become a pest for crops and gardens.

Fruit trees, garden plants, crop vegetables and some cereals

2

COMMON NETTLE APHID*Microlophium carnosum*

200

20

TYPE: Primary consumer**NATURAL HISTORY:** Sexual stage in autumn with eggs laid near the base of the nettle stem, in mild winters asexual reproduction gives identical individuals.

Feeds on stinging nettle (+1)

2

HOUSE SPARROW*Passer domesticus*

40

04

TYPE: Secondary consumer**SPECIAL BEHAVIOUR:** Engages in social activities such as dust bathing and social singing: When placed on the table, all other house sparrow cards in the hands of players are to be placed on the table. If there are no places, the card is discarded.**NATURAL HISTORY:** Highly successful in most parts of the world where it has been introduced due to its adaptation to living with humans and to a wide range of conditions.

Chiefly insects, of which beetles, caterpillars, dipteran flies, and aphids

3

10



10



10



10



"Eikennapjesgal Neuroterus albipes forma laeviusculus-levelsadjust-mask" by Rasback available at https://en.wikipedia.org/wiki/Gall_wasp#/media/File:Eikennapjesgal_Neuroterus_albipes_forma_laeviusculus-levelsadjust-mask.jpg under CC BY-SA 3.0

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Cynipidae

"Blattschneiderbiene Megachile centuncularis beim Anflug auf ihr Nest" by Bernhard Plank available at https://commons.wikimedia.org/wiki/File:BlattschneiderBiene_Megachile_centuncularis.jpg under CC BY-SA 2.5

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Megachilidae

"Redtailed bumblebee" by Mortendreier available at https://commons.wikimedia.org/wiki/Bombus_lapidarius#/media/File:Redtailed_bumblebee.jpg under CC BY-SA 2.5

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Hymenoptera
Family: Apidae

Passer domesticus couple by Milvus-commonswiki available at https://commons.wikimedia.org/wiki/Passer_domesticus#/media/File:Passer_domesticus_couple.jpg under CC BY-SA 2.0

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Sauropsida
Order: Passeriformes
Family: Passeridae

"Common snail" by Dilliff available at https://commons.wikimedia.org/wiki/Helix_aspersa#/media/File:Common_snail.jpg under CC BY 2.0

ECO-DIVO



Kingdom: Animalia
Phylum: Mollusca
Class: Gastropoda
Order:
Family: Helicidae

MALLARD

Anas platyrhynchos



20 🍷 25 🍎 50 🍇 🦷 04

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Males sometimes forcibly mate with females whether or not they have a brood of ducklings: When two of these cards are on the table, its provided biomass is halved. Predators no longer supported are discarded and the person(s) who had placed this predator card loses 2 points.

NATURAL HISTORY: Ancestor of most breeds of domestic ducks.

🍴🍷 Gastropods, invertebrates, crustaceans, worms, many varieties of seeds and plant matter, and roots and tubers.

3

GARDEN SPIDER

Araneus diadematus



20 🍷 🍷 10

TYPE: Secondary consumer

SPECIAL BEHAVIOUR: Occasionally, the female will eat the male directly after mating: When two of these cards are present on the table, its provided biomass is halved. Predators that are no longer supported will be discarded and the person(s) who had placed this predator card loses 2 points.

NATURAL HISTORY: Markings on the abdomen are formed in cells filled with guanine, which is a byproduct of protein metabolism.

🍴🍷 Insects

3

RED FOX

Vulpes vulpes



16 🦷 08

TYPE: Top predator

NATURAL HISTORY: Its range has increased alongside human expansion, having been introduced to Australia, where it is considered harmful to native mammals and bird populations.

🍴🍷 Voles, mice, ground squirrels, hamsters, gerbils, woodchucks, pocket gophers and deer mice.

4

BADGER

Meles meles



12 🦷 10 🍷 🦷 08

TYPE: Top predator

NATURAL HISTORY: The spread of bovine tuberculosis has been attributed to badgers, however recent peer reviewed reports state that the issue is more to do with cattle management.

SUSCEPTIBILITY: Rabies, habitat loss, hunted as pestreductions, collection for venom extraction

🍴🍷 Earthworms, large insects, small mammals, carrion, cereals and root tubers

4

SCOTTISH WILD CAT

Felis sylvestris



16 🦷 08

TYPE: Top predator

SPECIAL BEHAVIOUR: Leave scent by rubbing glands in their cheeks and tail against objects: If there is another Scottish wildcat card on the table, that card is discarded and the person who had placed that card loses 2 points.

NATURAL HISTORY: Unique to Britain, and now only found in Scotland.

SUSCEPTIBILITY: Deforestation, hybridisation with domestic cats

🍴🍷 Rabbits, rats, hare and other small mammals.

4

AMERICAN MINK

Neovison vison



16 🦷 08

TYPE: Top predator

SPECIAL BEHAVIOUR: Mink are strictly territorial, use their scats to mark the boundaries of their territory: If there is another Mink card on the table, that card is discarded and the person(s) who had placed this card loses 2 points.

NATURAL HISTORY: Wild population was established from multiple escapes (and perhaps deliberate releases) all over the country from 1920s.

🍴🍷 A wide range of mammals, birds and fish

4

Araneus diadematus (aka) by Aka available at [https://commons.wikimedia.org/wiki/File:Araneus_diadematus_\(aka\).jpg](https://commons.wikimedia.org/wiki/File:Araneus_diadematus_(aka).jpg) under CC BY-SA 2.5

Anas platyrhynchos male female quadrat by Weblars available at https://en.wikipedia.org/wiki/Mallard#/media/File:Anas_platyrhynchos_male_female_quadrat.jpg under CC BY-SA 2.5

ECO-DIVO

ECO-DIVO

ECO-DIVO



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Canidae



Kingdom: Animalia
Phylum: Arthropoda
Class: Arachnida
Order: Araneae
Family: Araneomorphae



Kingdom: Animalia
Phylum: Chordata
Class: Sauropsida
Order: Anseriformes
Family: Anatidae

Haselmaus by Pdreijnders available at https://commons.wikimedia.org/wiki/File:American_Mink.jpg under CC BY-SA 3.0

Scottish wildcat & kitten by Mariomassone available at https://en.wikipedia.org/wiki/Wildcat#/media/File:Scottish_wildcat_%26_kitten.jpg under CC BY 2.0

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ECO-DIVO

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Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Felidae



Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae

AMERICAN MINK

Neovison vison



16

08

TYPE: Top predator

SPECIAL BEHAVIOUR: Mink are strictly territorial, use their scats to mark the boundaries of their territory. If there is another Mink card on the table, that card is discarded and the person(s) who had placed this card loses 2 points.

NATURAL HISTORY: Wild population was established from multiple escapes (and perhaps deliberate releases) all over the country from 1920s.

A wide range of mammals, birds and fish

4

COMMON EARTHWORM

Lumbricus terrestris



200 10

04 10

TYPE: Decomposer and scavenger

NATURAL HISTORY: Pull leaves into the mouth of its burrow where they partially decay before being eaten.

Plant material, dead insects and faeces

2

Overview

ECO-DIVO is an educational 2-in-1 card game based on ecosystems and biodiversity modules of the A levels curriculum.

Explore the fascinating natural history of organisms in the United Kingdom and learn about species interactions, human impacts and diversity while competing to build a fascinating food web or diversity groups.

To begin, read the CARD LABELS and ECO GAME PLAY or DIVO GAME PLAY cards.

Will you unfold an intricate food relationship or destroy the ecosystem?

Stand to win an ASAB USB stick by giving us feedback on the game at this website:
<https://goo.gl/BZKcXr>

BURYING BEETLE

Nicrophorus vespilloides



08

20

TYPE: Decomposer and scavenger

NATURAL HISTORY: Female lays her eggs on or beside the buried body and the resulting larvae eat the rotting corpse.

Dead animals

2

BLUE BOTTLE

Calliphora vomitoria



100 04

20

TYPE: Decomposer and scavenger

SPECIAL BEHAVIOUR: If one fly detects food, it will disperse a pheromone which will alert the others to the meal. When used, other players have to place down the same cards if they have any.

NATURAL HISTORY: The chest is bright purple and has spikes to protect themselves against other flies.

Adults feed on nectar, larvae feed on carcasses

2

COMMON HOUSEFLY

Musca domestica



100 04

20

TYPE: Decomposer and scavenger

SPECIAL BEHAVIOUR: Deposits faeces constantly, transmitting diseases: all predators consuming this species will provide 1 less bone or 3 less invertebrate.

NATURAL HISTORY: Most common of all domestic flies, accounting for about 91% of all flies in human habitats.

Dead or decaying plant or animal material

2

NAME

SCORE

PENALTY SCORES

Lumbricus terrestris by James K. Lindsey available at https://commons.wikimedia.org/wiki/File:Lumbricus_terrestris.jpg under CC BY-SA 2.5

Hazelmaus by Pdrejnders available at https://commons.wikimedia.org/wiki/File:American_Mink.jpg under CC BY-SA 3.0

ECO-DIVO

ECO-DIVO

ECO-DIVO

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Kingdom: Animalia
Phylum: Annelida
Class: Clitellata
Order: Haplotaxida
Family: Lumbricidae

Kingdom: Animalia
Phylum: Chordata
Class: Mammalia
Order: Carnivora
Family: Mustelidae

Musca domestica female by James K. Lindsey available at https://commons.wikimedia.org/wiki/File:Musca_domestica_female.jpg under CC BY-SA 2.5

Calliphora vomitoria edit by Papa Lima Whiskey available at http://en.wikipedia.org/wiki/Blue_bottle_fly#/media/File:Calliphora_vomitorea_edit.jpg under CC BY-SA 3.0

Nicrophorus vespilloides3 by Factumquintus available at https://en.wikipedia.org/wiki/Nicrophorus_vespilloides#/media/File:Nicrophorus_vespilloides3.jpg under CC BY-SA 2.0 de

ECO-DIVO

ECO-DIVO

ECO-DIVO



Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Diptera
Family: Muscidae

Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Diptera
Family: Calliphoridae

Kingdom: Animalia
Phylum: Arthropoda
Class: Insecta
Order: Coleoptera
Family: Silphidae