

How Open Licenses Help Sustain the Open Ecosystem

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Dr. Monica Granados, Director of Open Science



I AM AN ECOLOGIST

By training. I'm fascinated by the way resources are so expertly used in ecological systems. Nowhere is this more explicit than in finch beaks.



Party hats on baby seals to identify them

Monica Granados
Director of Open Science, Creative
Commons

DARWIN'S FINCHES

A group of about 18 species of passerine birds that show dramatic diversity in beak form and function.



Finch beaks vary in size in shape according to diet



Small seeds



Medium seeds

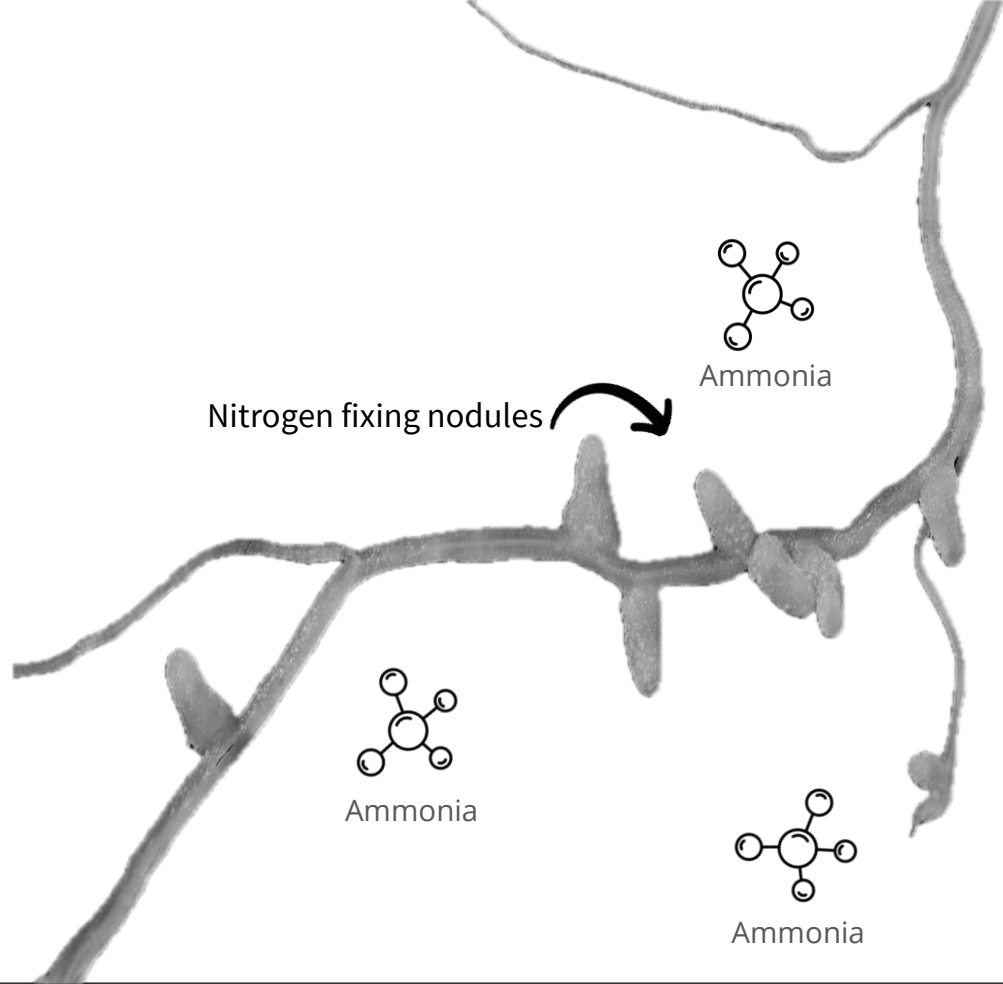


Large seeds

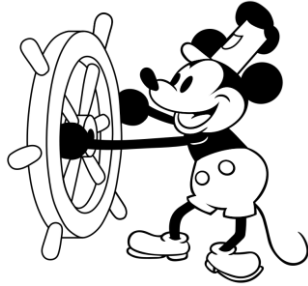
De Leon et al. 2014 Journal of Evolutionary Biology

NITROGEN FIXATION

Nitrogen is one of the most important and abundant nutrients yet it is inaccessible in its atmospheric form to most organisms.



IN A WORLD THAT HAS SO MANY
KNOWLEDGE RESOURCES, WHY
CAN'T WE USE THEM TO THE
BENEFIT OF HUMANITY?



Sonny Bono Copyright Term Extension Act was enacted in 1998. It extended the term of copyright for every work in the United States to life of the creator plus 70 years.

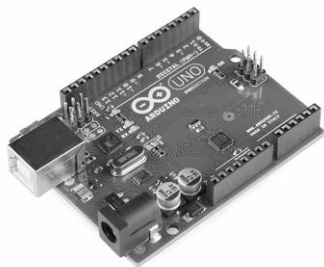
“Creation always involves building upon something else. There is no art that doesn't reuse.”



Larry Lessig
Co-founder Creative Commons

WHAT IS CREATIVE COMMONS?

CC empowers individuals and communities around the world through technical, legal, and policy solutions that enable the sharing of education, culture, and science in the public interest.



Arduino



Girl with the Pearl Earring



Cards Against Humanity

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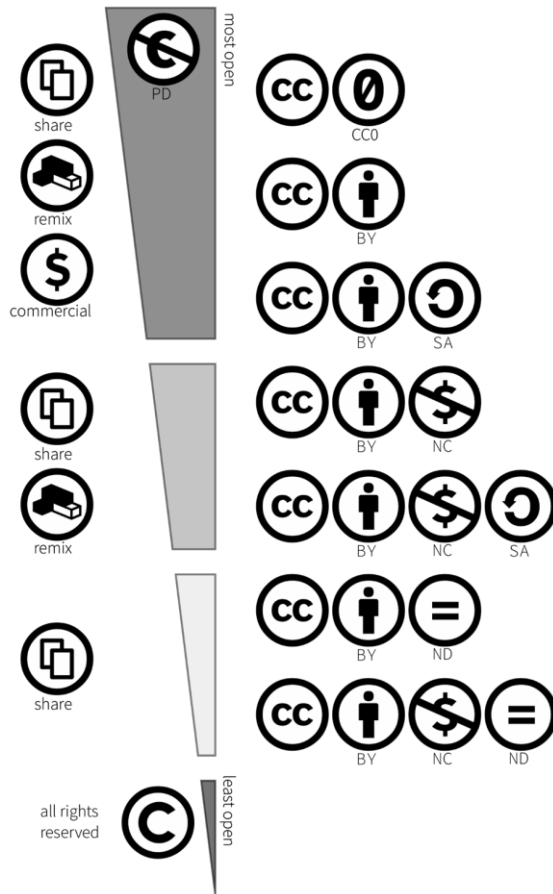
NC: Non-commercial



SA: Adaptations must be shared on same terms



ND: No derivatives or adaptations



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There are a myriad of outputs and materials that can be CC licensed.



Preprint

Version of the manuscript that has not finished the peer review process



Publication

Author accepted manuscript or version of record



Data

Collected numerical information associated with the publication



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WHAT HAVE © LICENSES
ENABLED?

OPEN COLLECTIONS

UK National History Museum has collections dating back hundreds of years and recently released digitized images of butterflies using CC0.

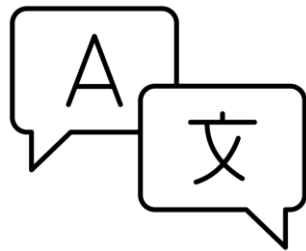
Researchers looked at 180,000 digitized butterflies to understand how they respond to climate change and found that hotter years grow bigger insects.



Wilson et al. 2022, Methods in Ecology and Evolution

OPEN LANGUAGE

The Pangloss collection is a CC-licensed archive of endangered and under-documented languages carried by LACITO, a multidisciplinary research laboratory dedicated to the study of languages with an oral tradition based on field surveys in various linguistic and cultural areas.



<https://pangloss.cnrs.fr/?lang=en>

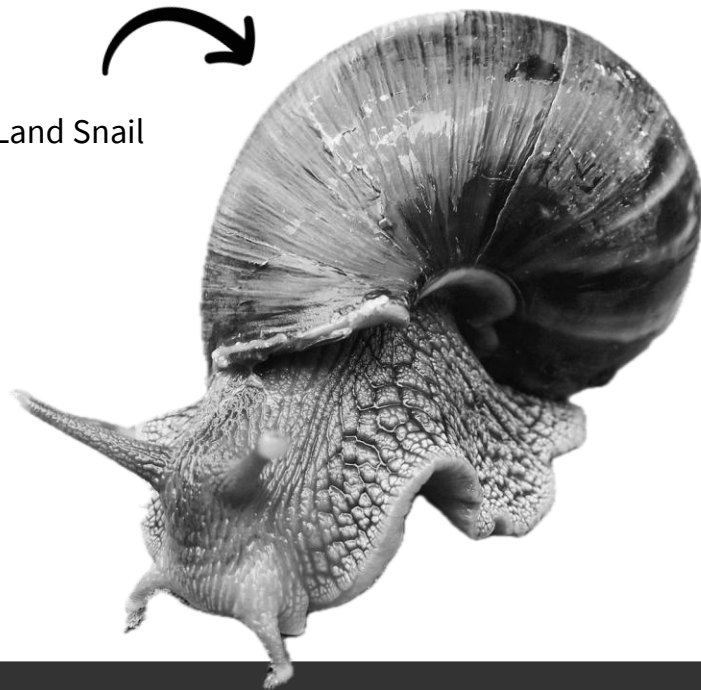
OPEN DATA

The giant land snail is a popular exotic pet and notorious vector of the rat lungworm, causing eosinophilic meningitis in humans.

Researchers used CC-licensed Global Biodiversity Information Facility data to show that the pet trade poses a risk for disease transmission even in areas where the snails are not climatically limited.

Gippet et al. 2023, Parasites & Vectors

Giant Land Snail



GROWING THE COMMONS



Canadiana
by CRKN | par RCDR



Canadian Research
Knowledge Network

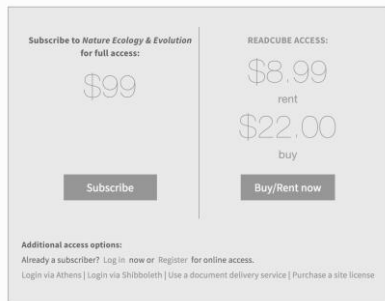
Réseau canadien
de documentation
pour la recherche

Assessment Guidelines for Open Access Publishers

SUPPORTING THE COMMONS

THREAT TO THE COMMONS

The combination of the commercialization of open access and the rise of consumer facing Large Language Models threatening the commons.



Commercialization of open
access



Artificial Intelligence



WHAT IS  DOING?

PROTECT HUMAN SHARING

The CC licenses will always have a role in mitigating human sharing. We are actively campaigning against defensive licensing and providing resources on why we should license content CC BY.



CC Resources

zenodo.org/communities/creativecommons/recor
ds



WHY USE THE CC BY LICENSE FOR PREPRINTS?

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Preprints are complete drafts of scientific research articles posted to an online repository before formal peer review and have long been part of the scientific publishing ecosystem. As the research community commits to much more open practices, preprints are increasingly becoming the primary vehicle for scientific dissemination.

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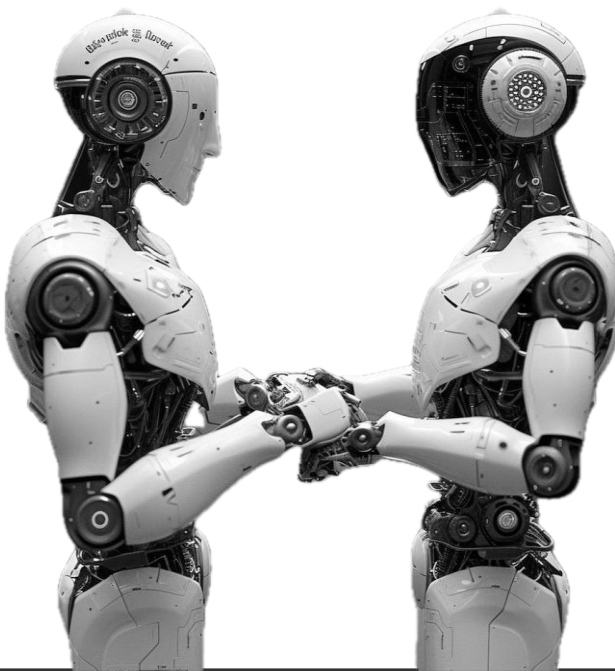
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MACHINE USE OF CONTENT

To meet this challenge, CC is developing a preference signals framework - a simple pact among data collection holders and AI developers. We believe openness and responsibility can co-exist, and that thoughtful tools can shape a better digital future for everyone.



TAKE COLLECTIVE ACTION!

CONTACT

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