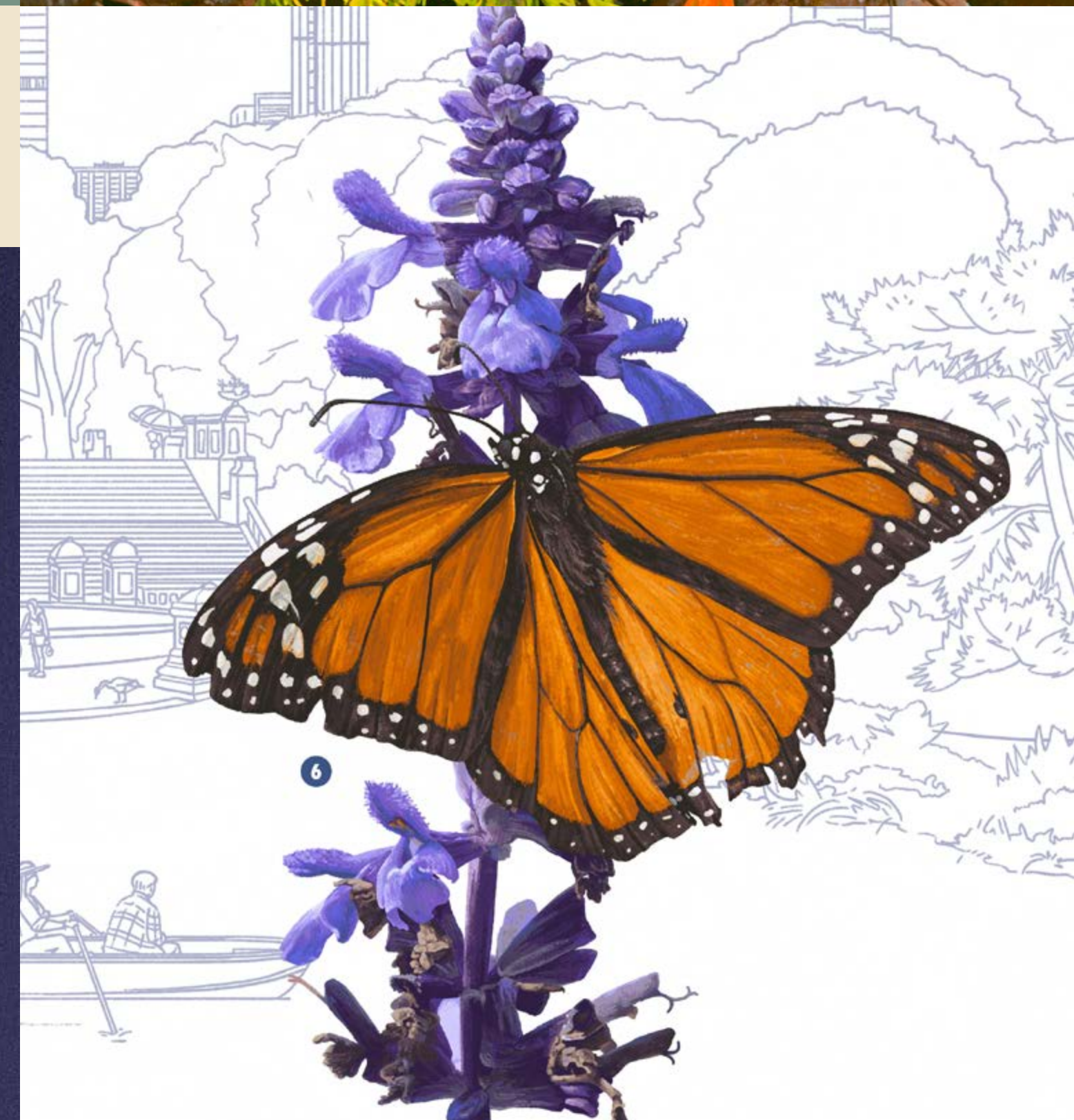
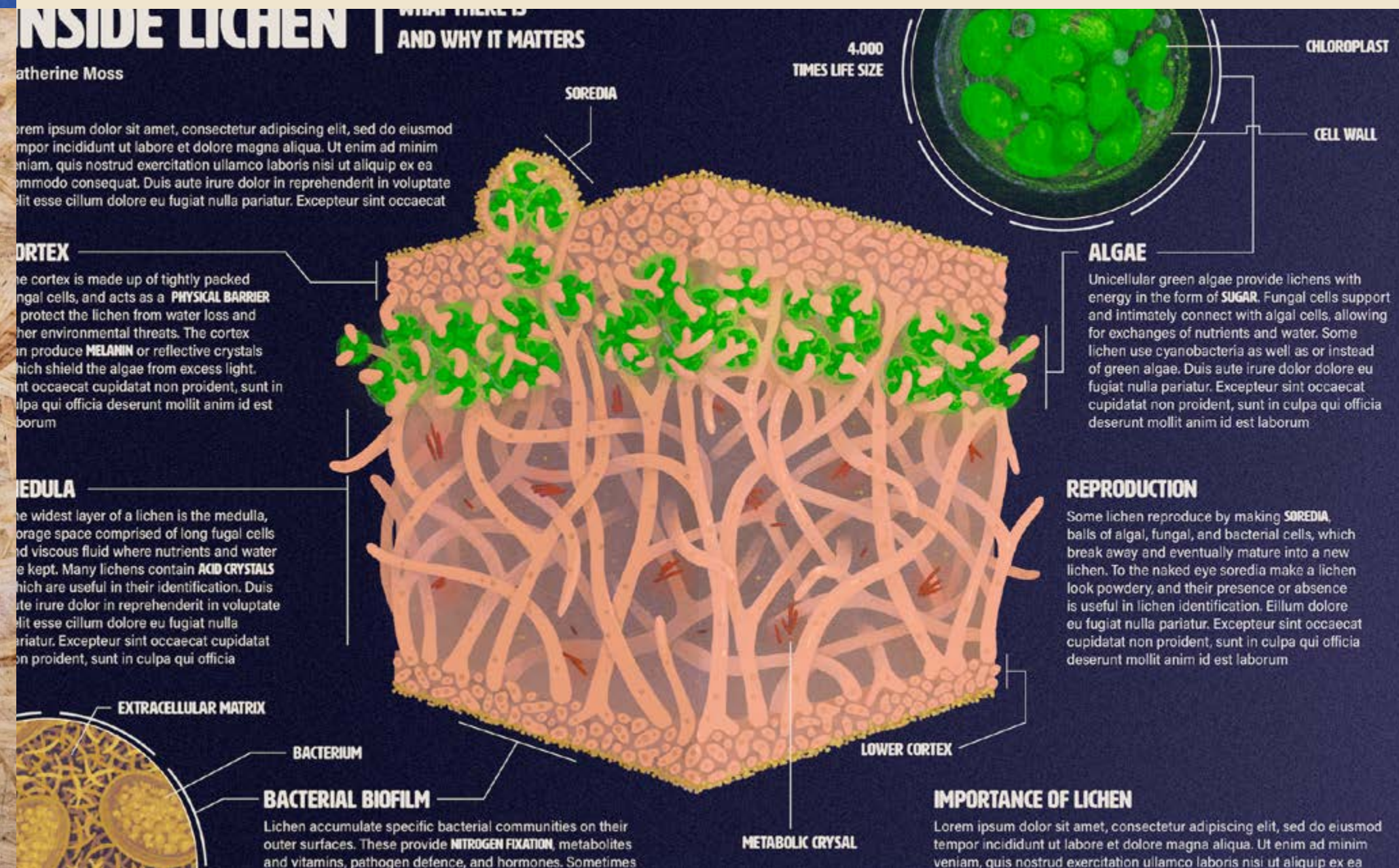




Ethan Roos

Science & Nature Illustrator



Central Park Pollinators



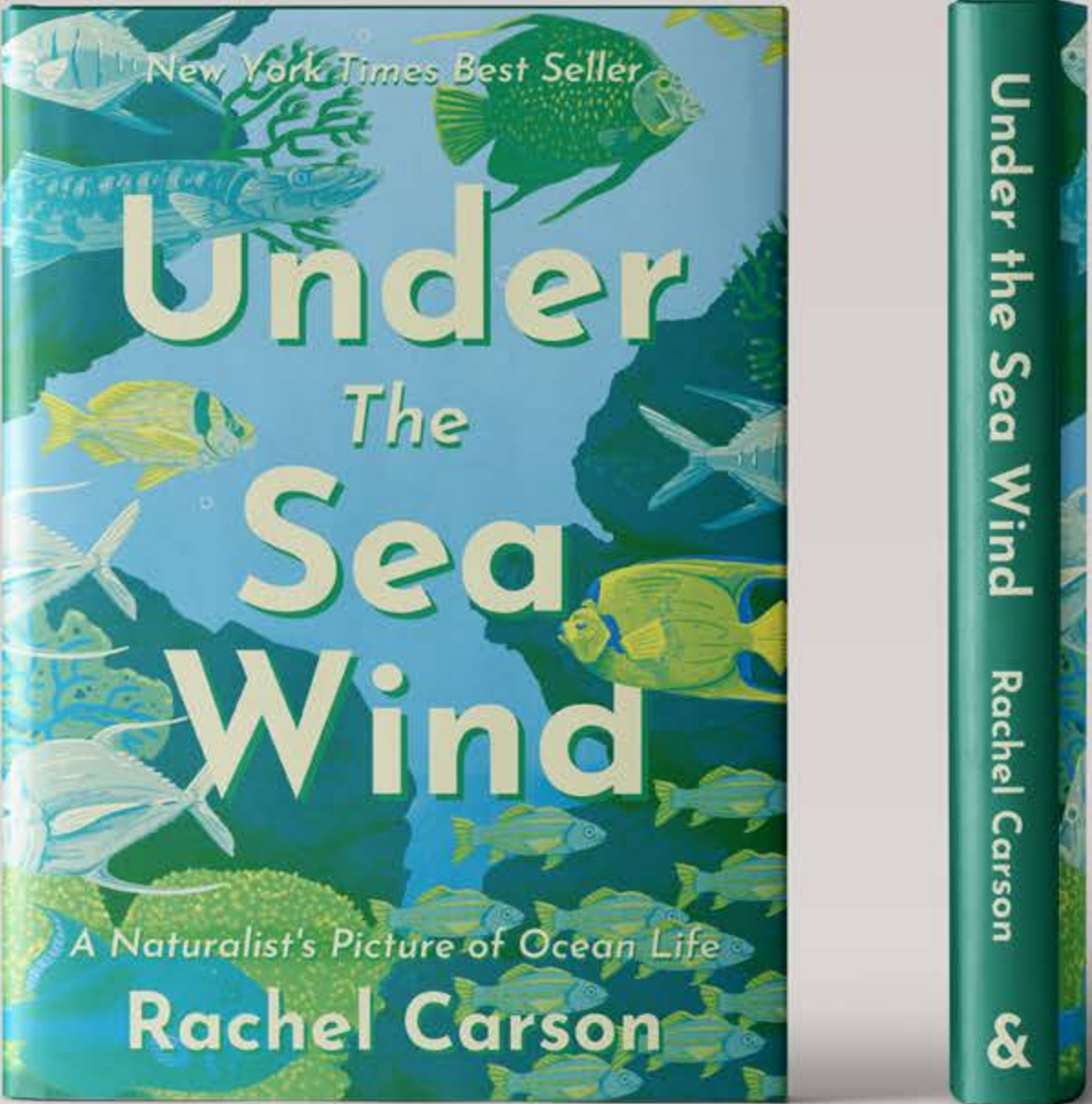
Species List

- 1) Spinebush Swallowtail
Papilio eurymachia
- 2) Common Bumble Bee
Bombus terrestris
- 3) Cabbage White
Pieris rapae
- 4) European Paper Wasp
Polybia dorsalis
- 5) Haver Fly
Eristalisia aeneus
- 6) Monarch Butterfly
Danais plexippus
- 7) American Lady
Adonis blue
- 8) Two-spotted Scolid
Scotia dubia
- 9) Green Scent Bee
Agathidium dorsale

All species are native to New York State and are found in Central Park.



Original



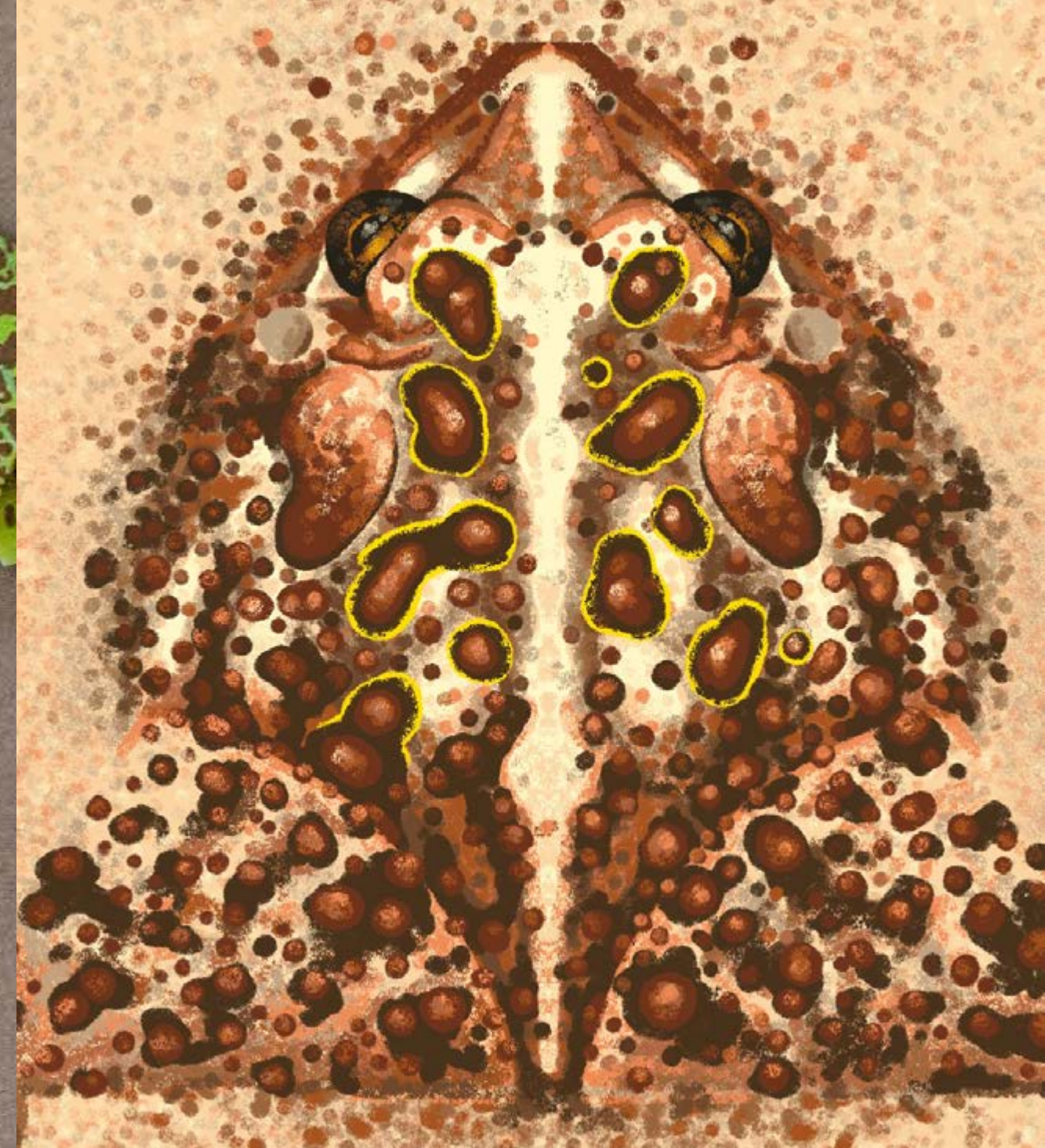
© Ethan Roos



Mockups



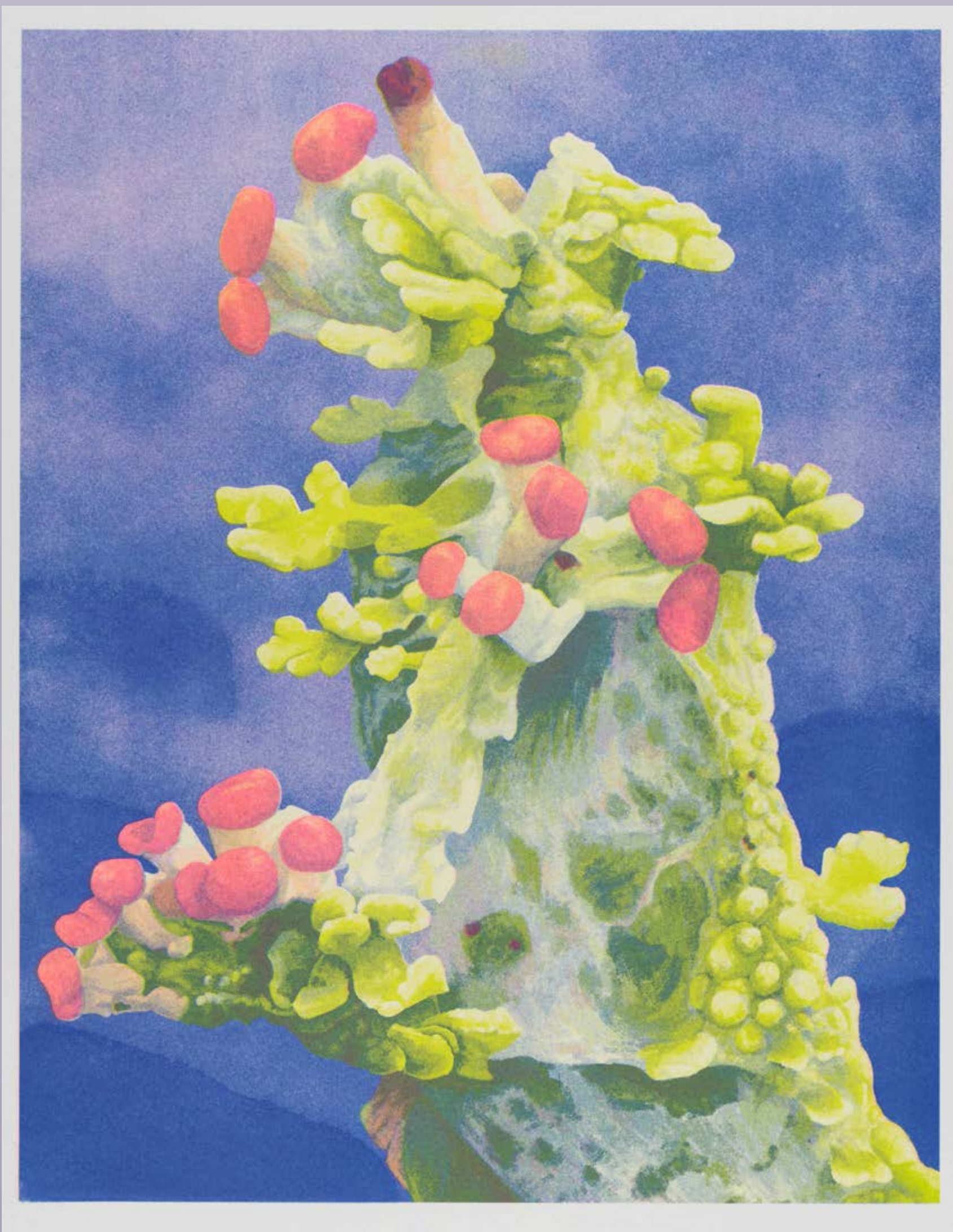
Illustrated Origami Paper



Green Frog

Lithobates clamitans





Risograph Lichen Poster Series (3/5)



Thumbnail



Color Sketch



Gulls & Snacks of the British Isles



Original

Mockup

INSIDE LICHEN

WHAT THERE IS AND WHY IT MATTERS

Katherine Moss

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CORTEX

The cortex is made up of tightly packed fungal cells, and acts as a **PHYSICAL BARRIER** to protect the lichen from water loss and other environmental threats. The cortex can produce **MELANIN** or reflective crystals which shield the algae from excess light. Sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

MEDULA

The widest layer of a lichen is the medulla, storage space comprised of long fugal cells and viscous fluid where nutrients and water are kept. Many lichens contain **ACID CRYSTALS** which are useful in their identification. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia

EXTRACELLULAR MATRIX

BACTERIUM

BACTERIAL BIOFILM

Lichen accumulate specific bacterial communities on their outer surfaces. These provide **NITROGEN FIXATION**, metabolites and vitamins, pathogen defence, and hormones. Sometimes yeasts are present, though it is unclear how much these contribute. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint

24,000 TIMES LIFESIZE

SOREDIA

4,000
TIMES LIFE SIZE

CHLOROPLAST

CELL WALL

ALGAE

Unicellular green algae provide lichens with energy in the form of **SUGAR**. Fungal cells support and intimately connect with algal cells, allowing for exchanges of nutrients and water. Some lichen use cyanobacteria as well as or instead of green algae. Duis aute irure dolor dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

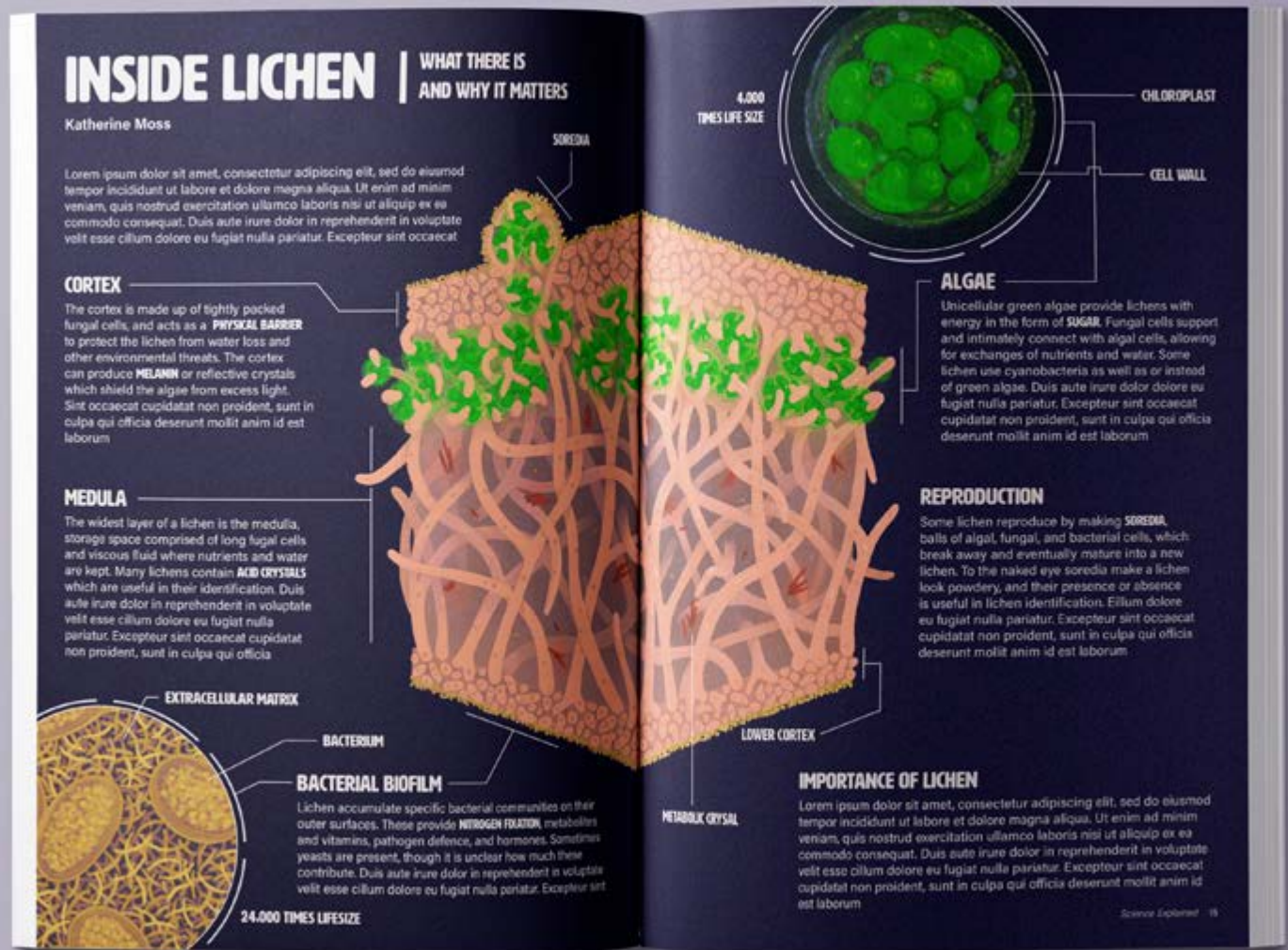
REPRODUCTION

Some lichen reproduce by making **SOREDIA**, balls of algal, fungal, and bacterial cells, which break away and eventually mature into a new lichen. To the naked eye soredia make a lichen look powdery, and their presence or absence is useful in lichen identification. Eillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum

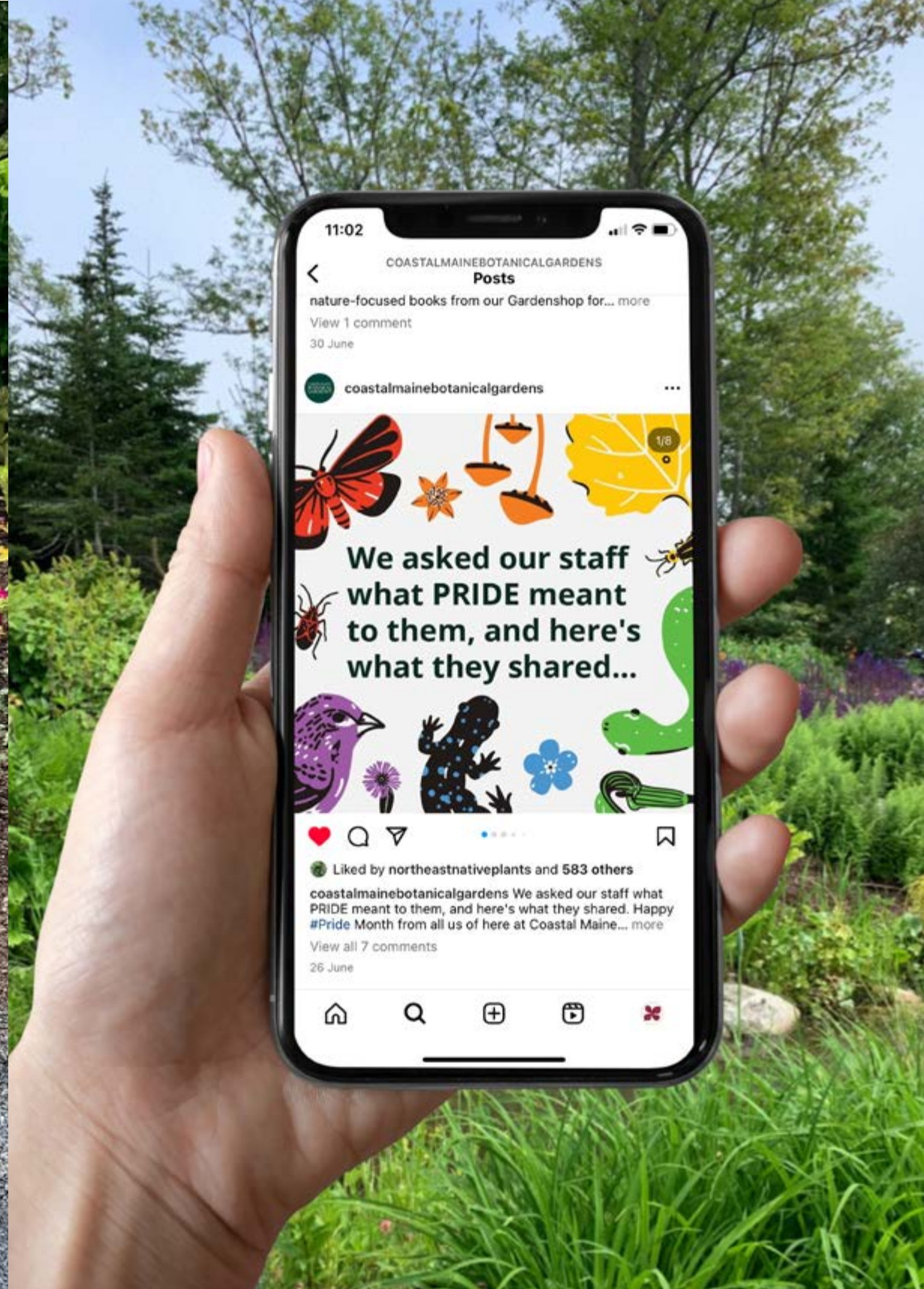
IMPORTANCE OF LICHEN

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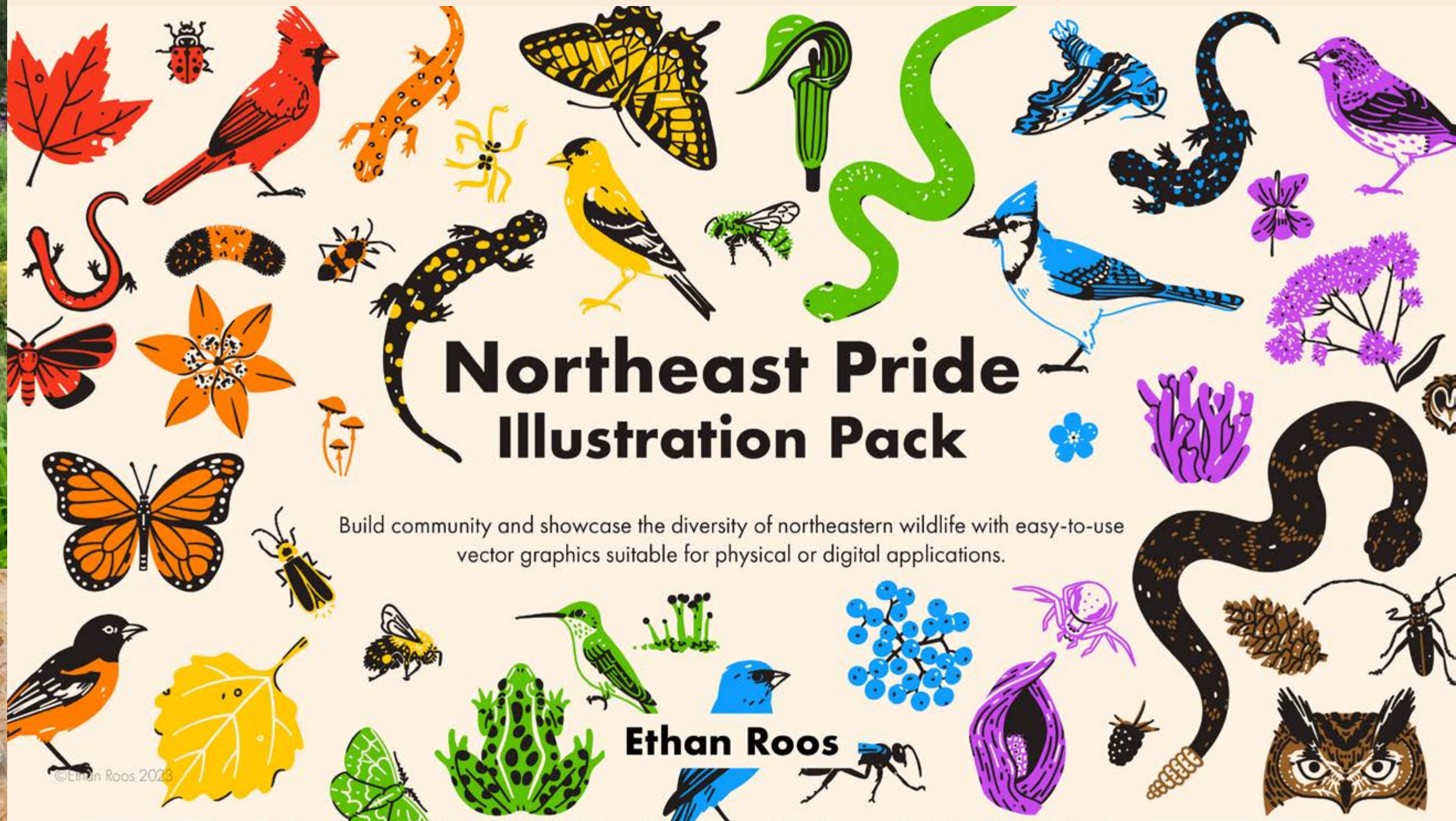
Science Explained 15



Mockup



Client uses (their layouts, onsite sinage and socials)



©Ethan Roos



Cover of Pitch deck

Unused Merchandise Mocks



Thumbnail Sketches



Linework Sketch



Final on Client's Mock

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AOI Folio: Ethan Roos