


An Ecological Approach to Wildlife Stewardship

September 30, 2020



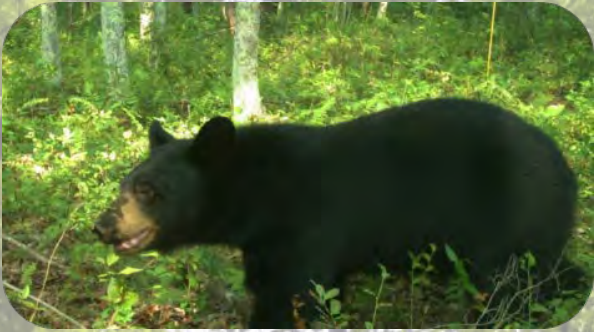


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What is a Land Trust?

A land trust is a **nonprofit** organization that, as all or part of its mission, actively works to **conserve land** by undertaking or assisting in land or **conservation easement acquisition**, or by its **stewardship** of such land or easements.

Which Wildlife?



A low-angle, upward-looking photograph of a dense forest canopy. The image is filled with a complex network of dark tree branches and vibrant green leaves. Sunlight filters through the foliage, creating a dappled light effect. The overall tone is bright and natural.

Understanding the Land



Cordilleran
Ice Sheet

Laurentide Ice Sheet



12,000 years ago

present day

glacier retreats...



12,000 years ago

present day

soil formation begins...



glacier retreats...



12,000 years ago

present day

grasses and forbs grow...



soil formation begins...



glacier retreats...



forests dominate the Northeast



grasses and forbs grow...



soil formation begins...



glacier retreats...



12,000 years ago

present day



forests dominate the Northeast



grasses and forbs grow...



soil formation begins...



glacier retreats...



12,000 years ago

present day



“We have been given the duty to live in balance and harmony with each other and all living things.”

From the Haudenosaunee Thanksgiving Address and Greetings to the Natural World

forests dominate the Northeast



grasses and forbs grow...



soil formation begins...



glacier retreats...



Columbus reaches Caribbean



12,000 years ago

present day

forests dominate the Northeast



grasses and forbs grow...



soil formation begins...



glacier retreats...



Half Moon sails up Hudson River



Columbus reaches Caribbean



12,000 years ago

present day



forests dominate the Northeast



grasses and forbs grow...



soil formation begins...



glacier retreats...



European colonizers begin to clear the extensive forestlands



Half Moon sails up Hudson River



Columbus reaches Caribbean



12,000 years ago

present day



forests dominate the Northeast



grasses and forbs grow...



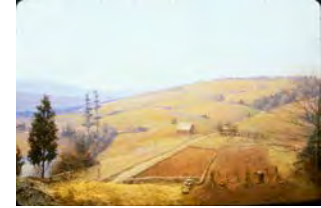
soil formation begins...



glacier retreats...



Most land has been cleared for farming



European colonizers begin to clear the extensive forestlands



Half Moon sails up Hudson River



Columbus reaches Caribbean



12,000 years ago

present day



forests dominate the Northeast



Forests regrow but are fragmented, many invasive species are introduced

grasses and forbs grow...



Most land has been cleared for farming



soil formation begins...



European colonizers begin to clear the extensive forestlands



glacier retreats...



Half Moon sails up Hudson River



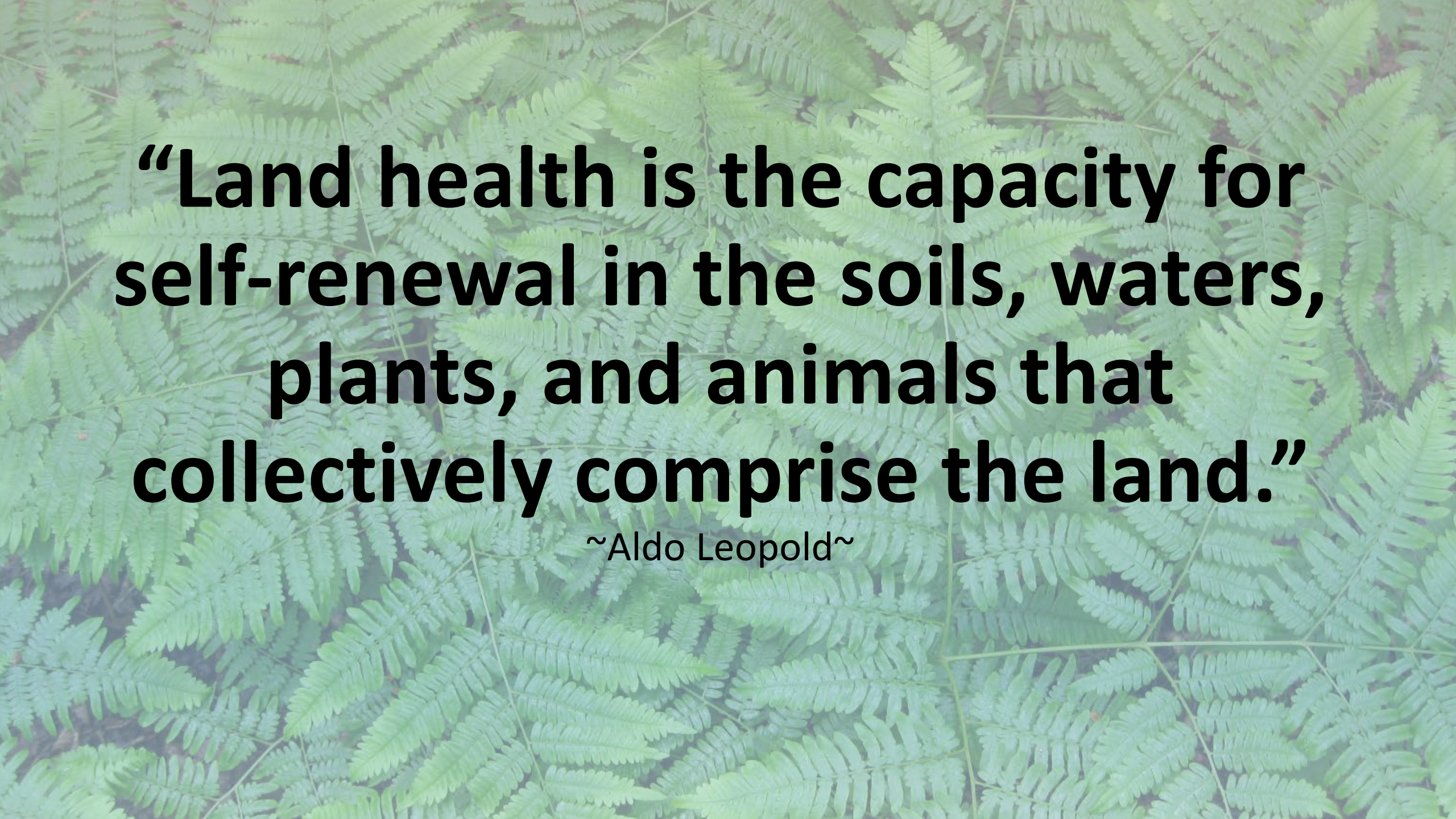
Columbus reaches Caribbean



12,000 years ago

present day





“Land health is the capacity for self-renewal in the soils, waters, plants, and animals that collectively comprise the land.”

~Aldo Leopold~

1700



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1740



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1830



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1850



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Secondary succession



Weeds and wildflowers grow



Pine seedlings and other plants begin growing

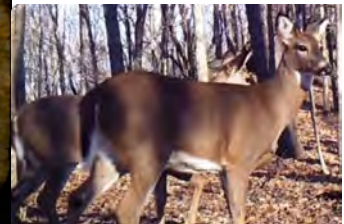


Pine forest grows



Pine-oak-hickory forest is developing

1850



1915



<https://harvardforest.photoshelter.com/galleries/C000068gHIUTc6BY/G0000OR2a2UhZafY/Diorama>

1930



Management Matters



A photograph of a theater stage. The stage is covered with heavy, red, pleated curtains. Above the curtains is a dark, arched structure, possibly a balcony or a decorative element of the stage. The ceiling is ornate, with gold-colored accents and a patterned design. The overall lighting is warm and focused on the stage.

**“All the world’s a stage,
And all the men and women merely players;
They have their exits and their entrances,
And one man in his time plays many parts.”**

As You Like It, Act II, Scene VII, William Shakespeare

A photograph of a theater stage. The stage is covered with heavy, red, pleated curtains. Above the curtains is a dark, arched structure, possibly a balcony or a decorative element of the stage. The walls of the theater are ornate, with gold-colored accents and decorative moldings. The lighting is warm and focused on the stage area.

**“All the world’s a stage,
And all the **species in it** merely players;
They have their exits and their entrances,
And one **life** in its time plays many parts.”**

As You Like It, Act II, Scene VII, William Shakespeare

Life's Essentials



Life's Essentials



Shelter

Where does it live?

Shelter

Where does it live?

Food

What does it eat?

Shelter

Where does it live?

Food

What does it eat?

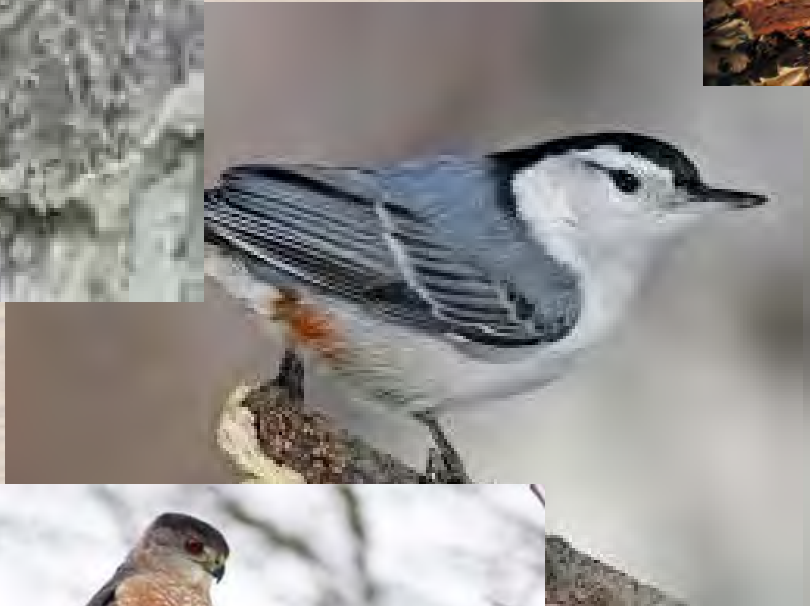
Safety

What eats it?









Shelter

Where does it live?

Shelter

Where does it live?

What does it need to make its home?

Underground den

Hollow tree

Nest on ground or in tree

Streambank

Dense woods or shrubbery



Food

What does it eat?

Carnivore? Herbivore? Omnivore?



Food

What does it eat?

Consider Seasonal
Changes in Diet
and Range



Safety

What eats it?

How can it escape predators?

Can it run fast?

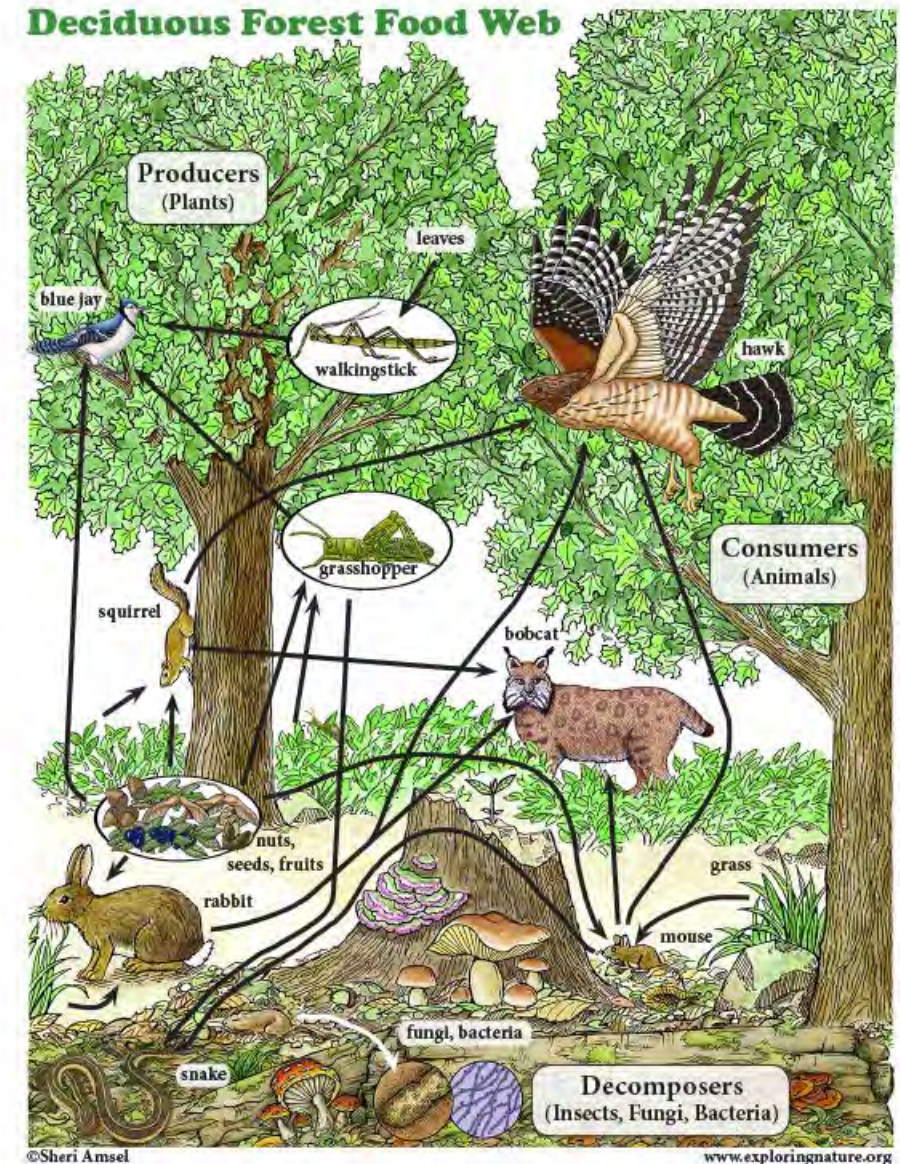
Does it fly?

Can it defend itself?

Is there shelter nearby?

Safety

What eats it?



Whenever there is a change to a habitat...

Whenever there is a change to a habitat...

Availability of food, shelter and safety changes...

Whenever there is a change to a habitat...

Availability of food, shelter and safety changes...

some species will benefit a lot

others will benefit a little

some will be harmed a little

others will be harmed a lot



Beaver Dam

some species will benefit

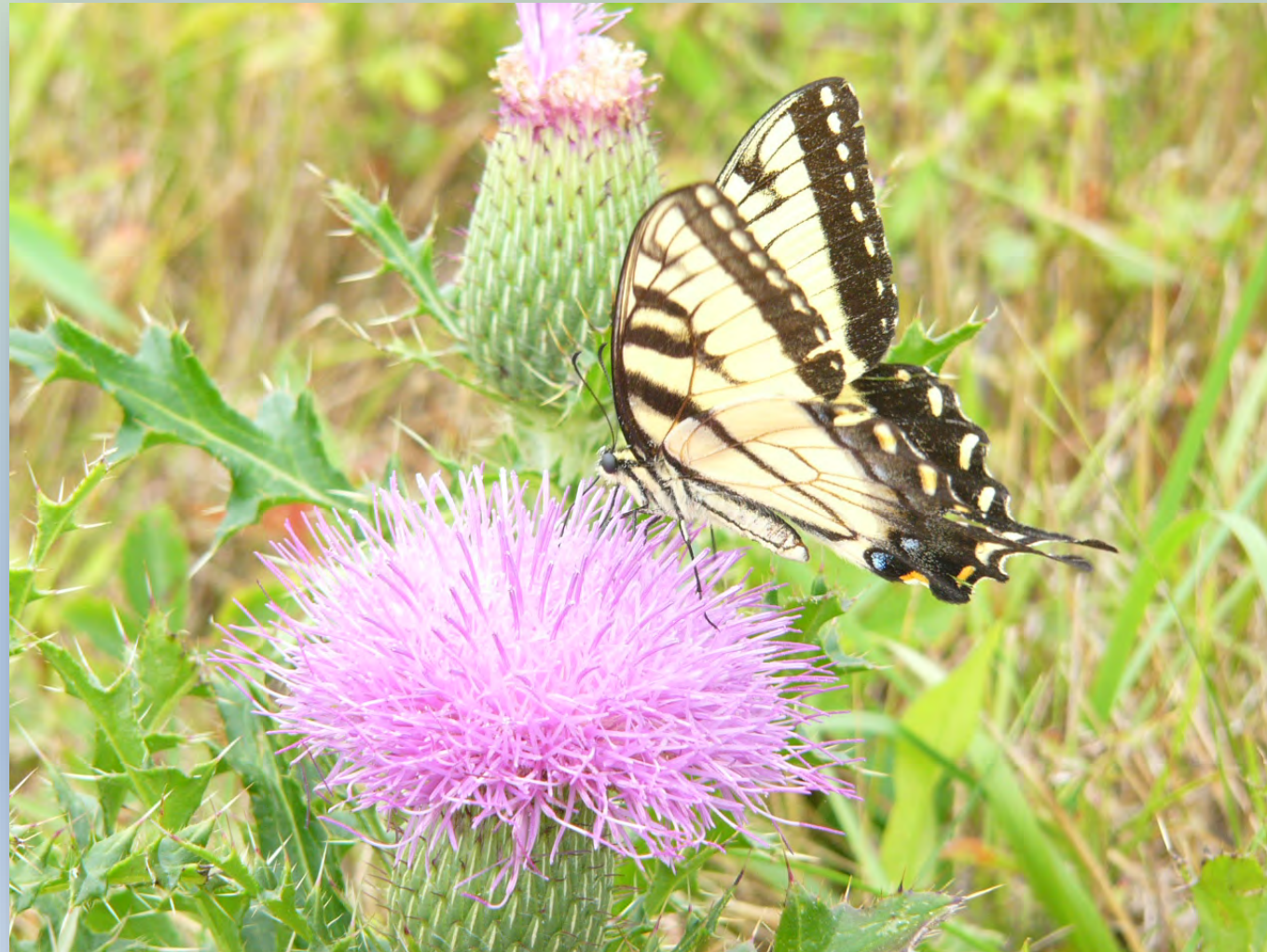


others will be harmed



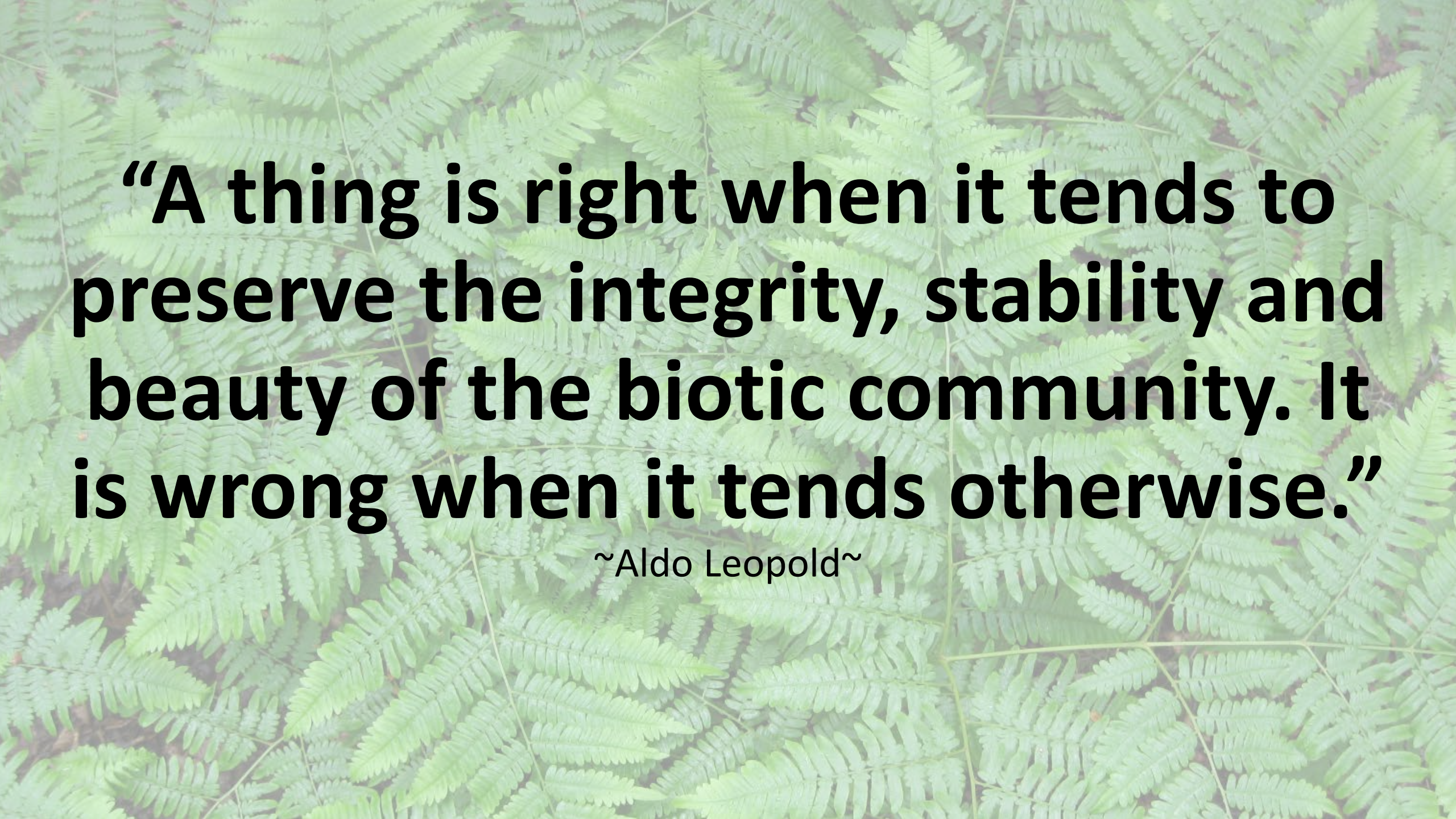
Stewardship

The responsible overseeing and protection of something considered worth caring for and preserving.



What Does It Mean To Be A Steward of the Land?

- **Listening**
- **Learning**
- **Observing**
- **Planning**



“A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.”

~Aldo Leopold~