



Supporting Biodiversity and Healthy Ecosystems Through Climate-friendly Gardening

Lincoln Land Conservation Trust has created this “refrigerator” reference to provide seasonal tips for gardening that support climate change mitigation (the reduction of carbon emissions), climate change resilience (the ability of ecosystems to respond to and thrive during change), and biodiversity. Healthy, biodiverse ecosystems are better equipped to withstand a changing climate and in turn also help sequester more carbon.

Don’t have a garden? No problem! There are plenty of ways to get involved. From supporting town-wide conservation efforts, to switching the lights off, there are lots of ways to make a difference.

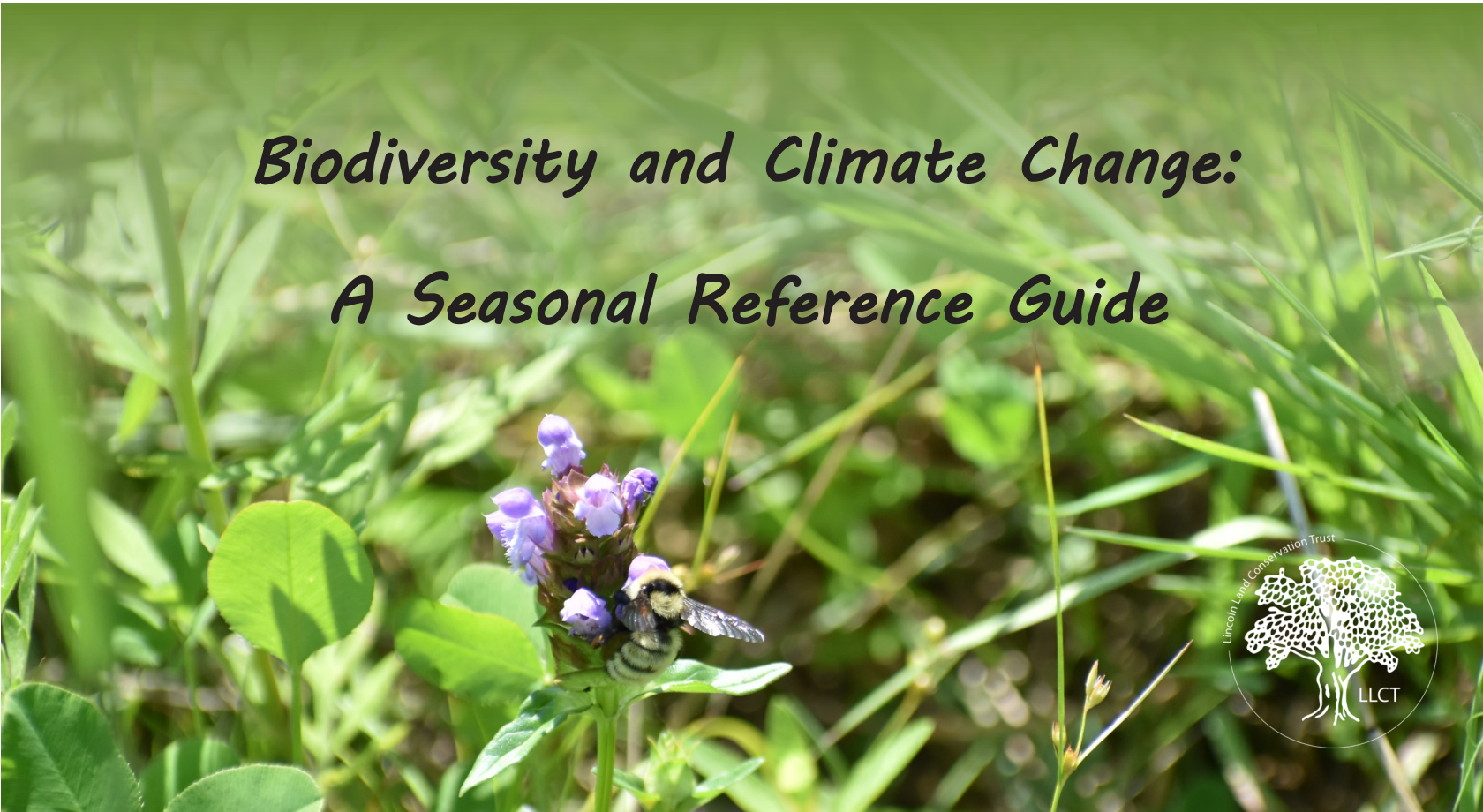


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*Biodiversity and Climate Change:
A Seasonal Reference Guide*





Seasonal tips for creating spaces that mitigate climate change, promote biodiversity and climate change resilience, and support healthy ecosystems

Climate Change Resilience

Climate Change Mitigation and Resilience

- **Turn off the Lights.** Eliminate unnecessary outdoor lighting, reducing electricity use and preserving habitat for fireflies and other wildlife. Install curtains. Shield lights and install motion detectors. Use red lights.
- **Water Responsibly.** Let lawns go dormant and only water sensitive or newly added plantings. Water at dusk or dawn to reduce evaporation. Install a drip irrigation system to conserve water. Although Lincolnsites use both town water and well water, ultimately we are all sharing one resource.



Summer

- **Leave the Leaves.** Decomposing leaves provide habitat for overwintering insects, deposit nutrients and carbon into the soil, and regulate soil temperature and moisture.
- **Leave the Stems.** Wildlife, e.g. some native bees use perennial stems for shelter. Seedheads and berries feed birds and small mammals.
- **Plant Native.** Fall is a great time to plant native shrubs, trees, and perennials. Their long roots store carbon deep in the soil. They support wildlife by providing food and shelter.
- **Manage Invasive Plants.** Compost invasive plants to return organic matter and carbon to the soil. Ensure plants cannot resprout or reseed from the compost pile.
- **Empty Rain Barrels.** Barrels can crack if water inside freezes. Store inside or cover.



Autumn

- **Resist the Urge to Burn.** Burn piles release more carbon into the atmosphere than letting brush decompose into soil. Decomposing brush piles also create habitat.
- **Let Lawns Grow.** Lawns are a monoculture and don't store much carbon. Decrease lawn space and increase carbon storage by planting deeply rooted native perennials, shrubs, and/or trees. Retained lawn can be supplemented with low-growing flowers such as Self-heal and Violets, and mowed less frequently and at a higher blade height (5 inches). Choose electric lawn mowers.
- **Install a Rain Barrel.** Catch roof run-off to conserve water use. Water deeply but infrequently to support strong roots.
- **Prune Cautiously.** If cutting back perennials, leave 1-2 feet of stem as some native bees nest in stems in early spring.
- **Go Pesticide Free.** Many pesticides are harmful to people and insects. Fertilizers can increase nutrient load and impact the water supply. For mosquito management, reduce standing water sources so they can't lay eggs. Invite natural predators like dragonflies into the garden.



Spring



Winter

- **Leave Trees and Snags.** Only remove trees if necessary. Native trees, particularly oaks, provide immense ecological services. If a tree needs to be removed, retain a wildlife snag (at least 12 feet of trunk standing). Snags are critical wildlife "condominiums" for many animals, including woodpeckers. The snag will decompose slowly and safely, returning much of its carbon back to the soil.
- **Install a Bird Bath.** Solar-heated bird baths support birds by providing clean, running water.
- **Plant for Wildlife.** Berries such as Winterberry Holly provide critical food for birds in the winter.

Want to learn more? Visit:

<https://lincolnconservation.org/what-we-do/land-stewardship/climate-change/>

