

# CARBON CAPTURE

Restoring Degraded Lands to Carbon Capturing, Native Prairie

### CAPTURING CARBON, AN INNOVATIVE AND EFFECTIVE WAY TO SLOW CLIMATE CHANGE.

**Carbon Sequestration I** Carbon is a substance that is found in many things, from grass to fuel to the air we breathe. When we burn fossil fuels like oil and gas, it releases a gas called CO<sub>2</sub>, which is one of the things causing our climate to change. One way to help tackle climate change is called carbon sequestration. This is when we capture and store CO<sub>2</sub> from the air. We can do this by growing plants, like grass and trees, which naturally absorb CO<sub>2</sub> from the air and store it in the soil. The grasslands and wetlands on the Katy Prairie Preserve just outside Houston are a great example of nature's effective way of storing carbon in soils.

**Land Restoration** I The Coastal Prairie Conservancy is actively working to restore grasslands and traditional agricultural lands to vibrant, native prairie. Native grasses boost the CO<sub>2</sub> absorbed from the air and stored in the soil, slowing climate change and reducing the greenhouse effect. Effective land conservation and restoration are strategic tools to curb rising temperatures and reduce net carbon emissions.

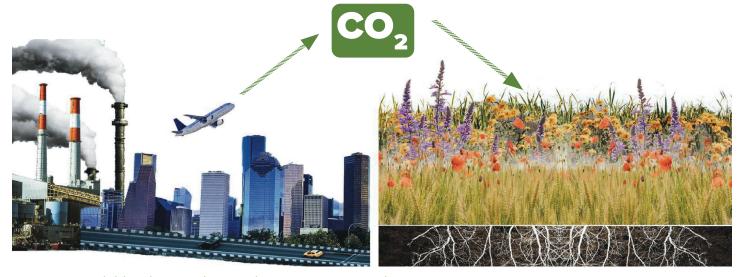
**Sustainable Grazing I** Livestock can be used as a tool to drive large-scale land restoration. Rotational grazing of cattle on grasslands from pasture to pasture helps the soil and plants capture and store more carbon. Waste matter adds fertility while hooves mix soil — this accelerates soil carbon storage and increases water retention. The Coastal Prairie Conservancy supports and encourages sustainable grazing because it ensures that grasslands are never overgrazed and allows the vegetation and soil to most effectively capture and store carbon.

WHAT ARE THE BENEFITS OF SOIL CARBON CAPTURE?

**Helps tackle** climate change

**Improves** watersheds

Offers cooling benefits to urban environments



- 1. Human activities like burning fossil fuels release CO2 into the atmosphere
- 2. Photosynthesis from native prairie grasses captures atmospheric CO<sub>2</sub>
- 3. Plant roots store atmospheric CO<sub>2</sub> as soil carbon, preventing it from re-entering the Earth's atmosphere

#### **CARBON CAPTURE** (continued)

## **QUICK FACTS**

**2,500 billion tons of carbon** is stored in soils globally.



Restoring degraded ecosystems could store up to 3 billion tons of carbon, roughly equivalent to 11 billion tons of CO<sub>2</sub> emissions.

Prairie has the **highest potential** for carbon capture per unit area, followed by forests and cropland.

A report from the Convention on Wetlands estimates the value of carbon storage in the world's wetlands could be as high as \$47 trillion.



1 ACRE OF
PRAIRIE LAND
CAN SEQUESTER
5 TONS OF
CARBON.

According to some estimates, the Katy Prairie Preserve captures the carbon equivalent to removing 10,000 passenger vehicles from the roads in a single year.

CONVERTED OPEN
GREENSPACE CAN REDUCE
URBAN TEMPERATURES
BY UP TO 7.2°F.

Forests and rangelands capture about 25% of global carbon emissions.



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Since 1992, the Coastal Prairie Conservancy has been helping sustain a resilient Texas by preserving coastal prairies, wetlands, farms, and ranches to benefit people and wildlife forever. FOLLOW US!
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