

**Wetlands in Black Rock Forest, NY:
changes in carbon storage since
deglaciation.**

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Mid-latitude forest ecosystems have been proposed as a "missing sink" for carbon today. The role of soils (including wetlands) in this proposed sink is unknown. How did past climate change affect net wetland carbon storage? An AMS-C-14 dated record of vegetational change from Sutherland Fen in Black Rock Forest, NY spanning the last 12,400 years is compared with existing data from nearby Sutherland Pond, NY and Glycerine Hollow riparian wetland cores. While Sutherland Fen demonstrates a high carbon accumulation rate during the late-glacial compared to the Holocene, the pond and riparian wetlands do not. Macrofossils reveal the local dominance of spruce at the Sutherland Fen. Cores from the northern portion of the riparian wetland are restricted to late-Holocene deposits. Changes in hydrology, temperature, and vegetational composition have all contributed to the changes in fen carbon storage from the late-glacial to the present.