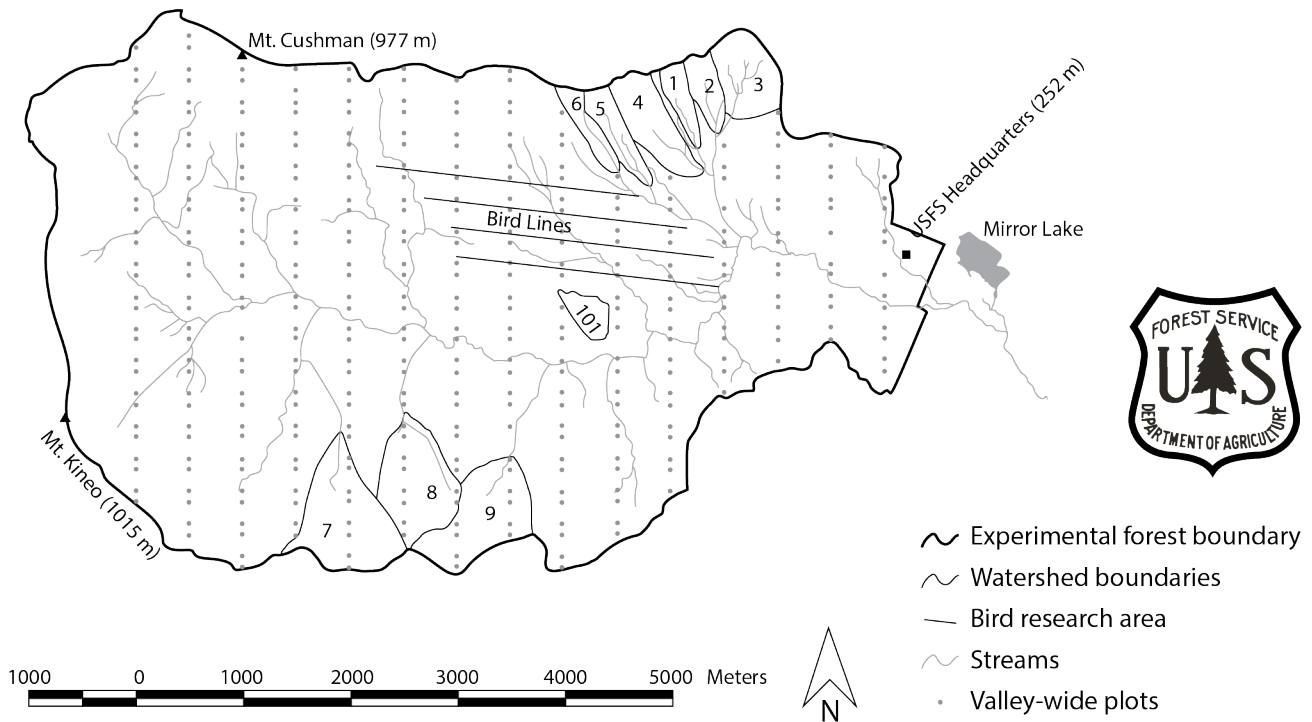


Hubbard Brook Experimental Forest



Experimental Watersheds

Watershed 1

Objective: To evaluate the role of calcium in regulating structure and function of base-poor forest ecosystems

Treatment: 45 tons of calcium silicate added via helicopter in 1999

Watershed 2

Objective: To assess the ecosystem response to devegetation

Treatment: All trees cut down and left in place in 1965, herbicide added 1966–1968

Watershed 3

Objective: Serves as the hydrologic reference watershed

Treatment: None

Watershed 4

Objective: To determine how progressive strip-cutting affects nutrient and hydrological cycling and stand regeneration

Treatment: Strip-cuts carried out in 1970, 1972, and 1974

Watershed 5

Objective: To assess the ecosystem response to whole-tree harvest

Treatment: Whole-tree harvest carried out in 1983–1984

Watershed 6

Objective: Serves as the biogeochemical reference watershed

Treatment: None

Watersheds 7, 8, and 9

Objective: Long-term measurements of streamflow, stream chemistry, and meteorology

Treatment: None

Watershed 101

Objective: To study the effect of block clearcutting on watershed hydrology and nutrient flux and cycling

Treatment: Commercially logged as a stem-only, block clearcut

Valley-Wide Research

- A grid of 431 research plots spans the entire Hubbard Brook Valley. These plots allow scientists to measure changes in forest vegetation, birds, and small mammals.
- A network of 30 motion-sensing cameras monitors the activity of many wildlife species.
- Migratory bird territories and nest locations are mapped within a large designated bird research area.
- Stream networks are mapped and water chemistry is studied in relation to watershed soils.