

CS2 — Chicago Conservation Corps / North Park Village Nature Center

Urban Tree Demographics Study — Volunteer Leader, 2010–2011

Category IV — Negentropy in Community Service | Reflections in Science and Education: A Forensic Documentary

William J. Moressi, Ph.D. · reflectionsinteachingandscience.org

Overview

As a member of the Chicago Conservation Corps (C3), William J. Moressi led a pilot study on tree identification, measurement, and location-tracking within a defined parcel of the North Park Village Nature Center (NPVNC) — a 46-acre nature preserve within the 155-acre North Park Village complex, managed by the Chicago Park District and adjacent to the NEIU main campus. The project was formally recognized by the City of Chicago, naming Moressi a Chicago Conservation Corps (C3) Leader for “Conservation Management of North Park Village Nature Center: A Pilot Study” (Certificate of Achievement, December 8, 2011).

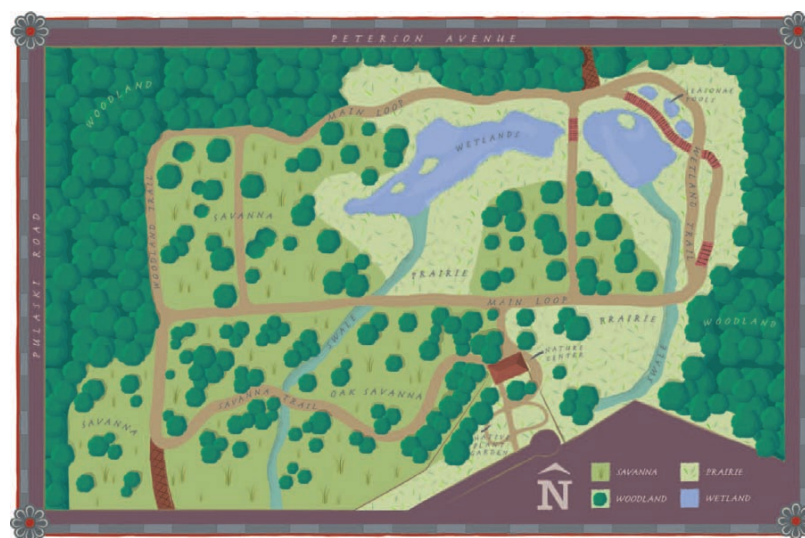


Fig. 1 — North Park Village Nature Center site map.

Negentropy Evaluation — Three-Part Test

Before State (Disorder)

The selected parcel of trees within NPVNC had no georeferenced inventory, no unique tree identification system, and no structured baseline data connecting tree location, species, and physical measurements — limiting the Nature Center's ability to study or manage its own tree population over time.

Ordering Agent

Moressi designed and led a multi-step field protocol: GPS resolution testing (via independent area-perimeter and circle-radius checks against known distances, using a Garmin eTrex Legend HCx), random tree selection within the parcel, GPS waypoint capture and girth measurement at breast height for each tree,

temporary tagging, transcription into a structured spreadsheet database, and — working with NPVNC Director Julie Sacco and Ecologist Bob Porter — fabrication and installation of permanent, uniquely coded aluminum tags (four-letter Genus-species code plus a unique number, e.g., FRPE91 for *Fraxinus pennsylvanica*).



Fig. 2 — Garmin eTrex Legend HCx GPS unit.



Fig. 3 — Temporary tree tag, attached in field.



Fig. 4 — Engraved aluminum tags, Dremel engraver, and calligraphy pen used for permanent tag fabrication.



Fig. 5a/5b — Finished permanent tags attached to trees.

GPS data was uploaded into Garmin MapSource and Google Earth, with a shared cloud-based project workspace created for the NPVNC Director, Ecologist, and C3 Explorer Track Coordinator.

After State (Measurable Outcome)

Approximately 50 trees within the defined parcel were GPS-located, measured, and assigned permanent, unique species-coded tags, consolidated into a working spreadsheet database (date, waypoint, tag number, girth, latitude/longitude, common name, genus/species, and unique key code). GPS resolution testing itself produced an honest, documented finding: comparison against known rope-measured distances showed meaningful variance (roughly 4 to 34 feet depending on direction and interval), a limitation the project explicitly reported rather than concealed — consistent with the same evidentiary discipline applied throughout this documentary.

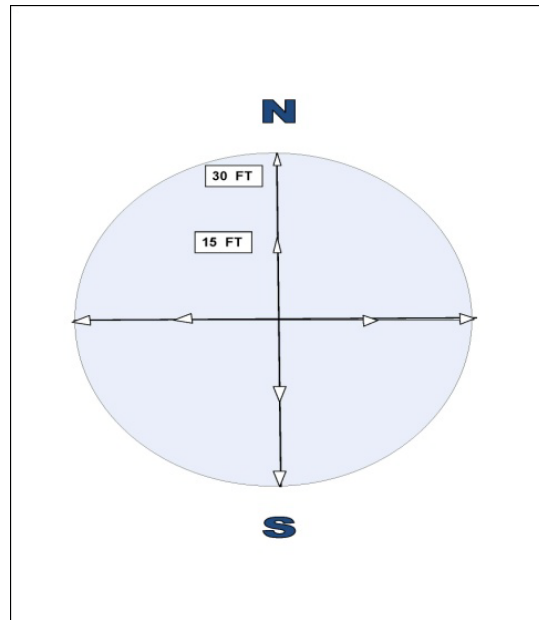


Fig. 6 — GPS Circle Radius Test diagram: 15 ft / 30 ft reference measurements used to check GPS accuracy.

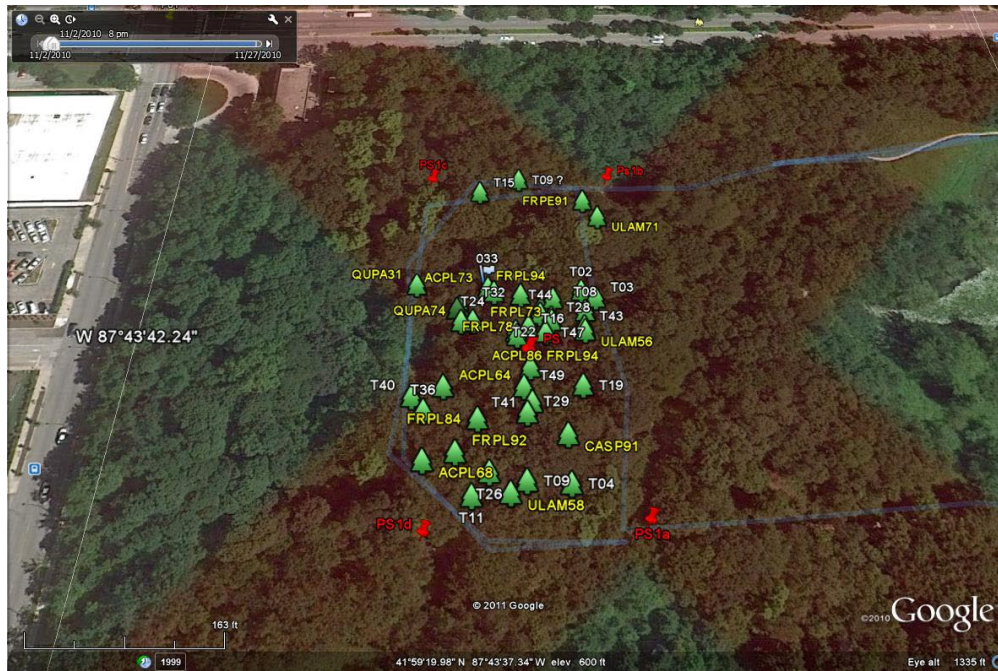


Fig. 7 — Step 2 tree waypoints uploaded to Google Earth: final tagged parcel with unique tree codes.

Institutional Recognition

The project was formally recognized by the City of Chicago via Certificate of Achievement, December 8, 2011, naming Moressi a Chicago Conservation Corps (C3) Leader for this specific pilot study.

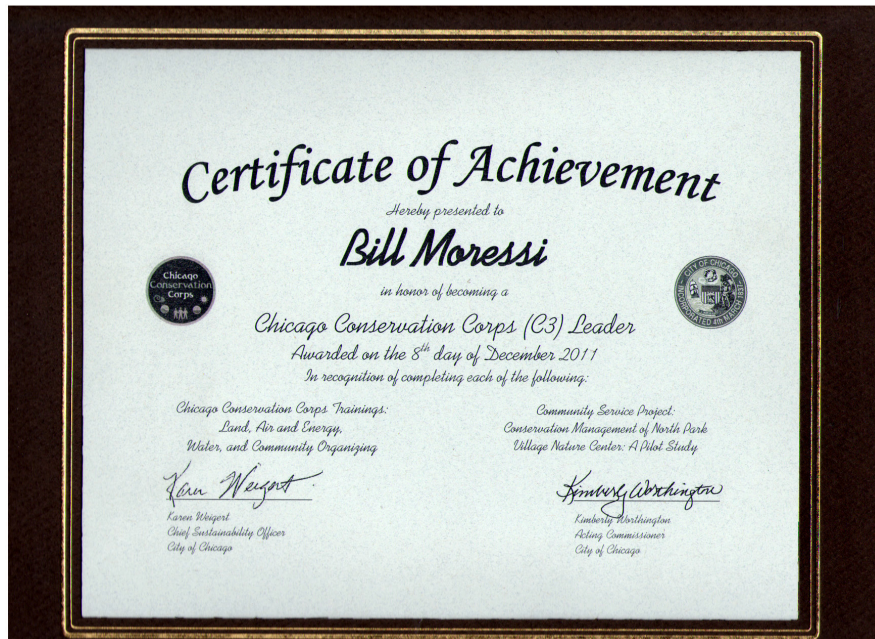


Fig. 8 — Certificate of Achievement, City of Chicago, December 8, 2011.

Primary Sources

- Project report ("Conservation Management of NPVNC Ecosystem: Identification, Measurement and Analysis of a Parcel of Trees"), including methods, GPS resolution test data, and field results
- Certificate of Achievement, City of Chicago, December 8, 2011
- Project presentation slide deck, including team roster and process documentation