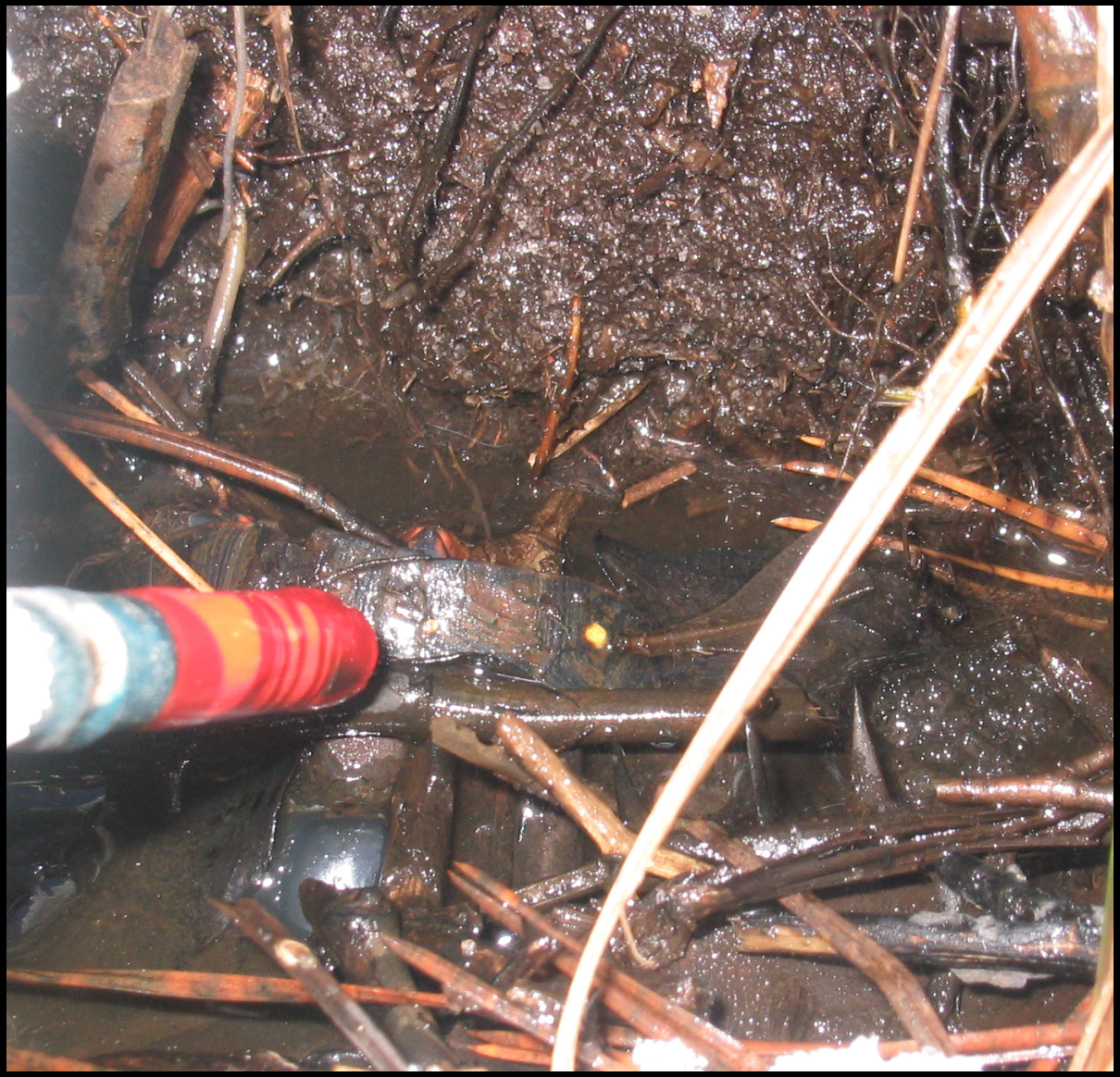
SPOTTED TURTLES' (Clemmys guttata) use of MOSQUITO-CONTROL DITCHES in SUFFOLK COUNTY, NEW YORK

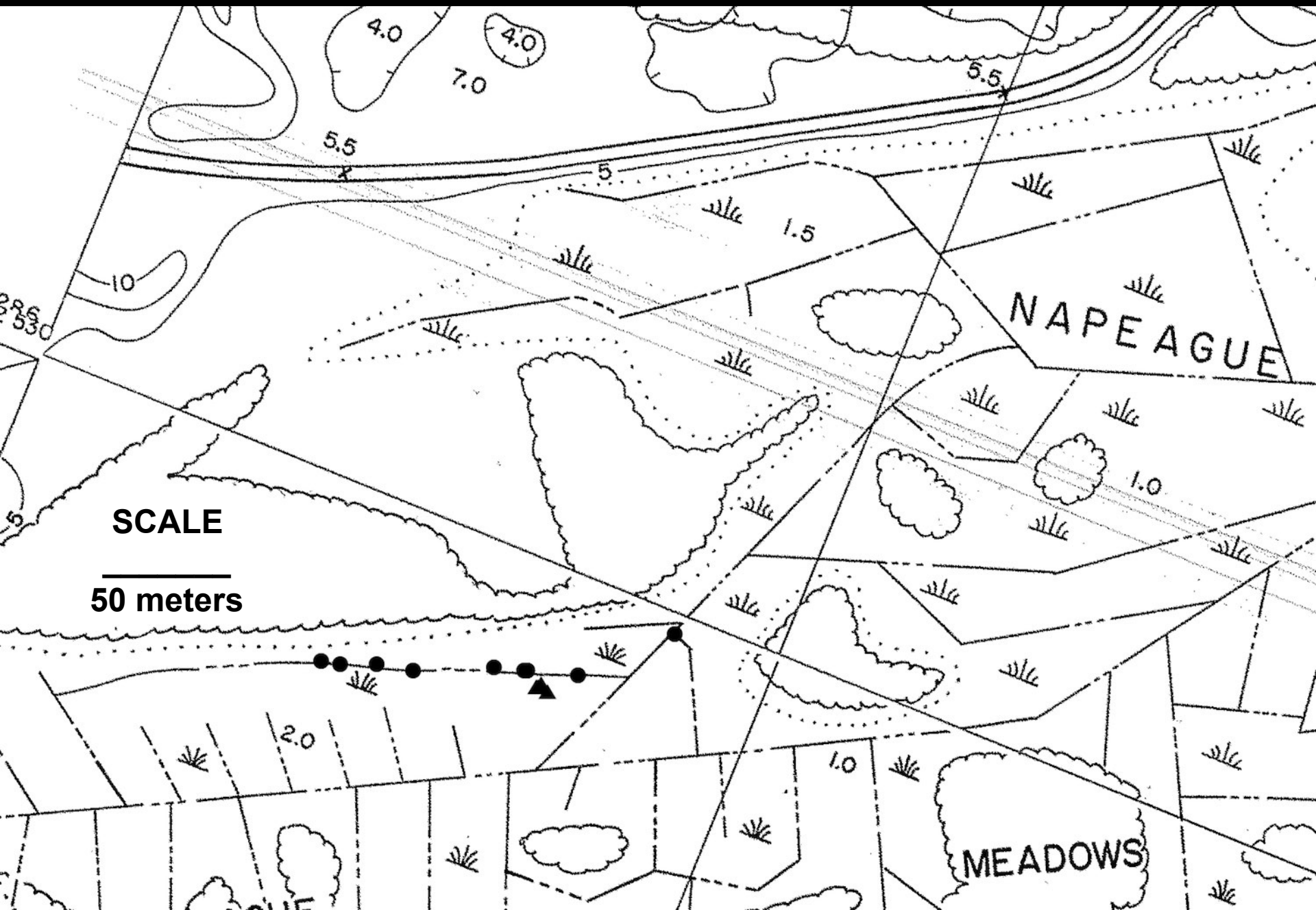
Mike Bottini

A research project funded by Suffolk County, Sabin Conservation Foundation and NYSDEC

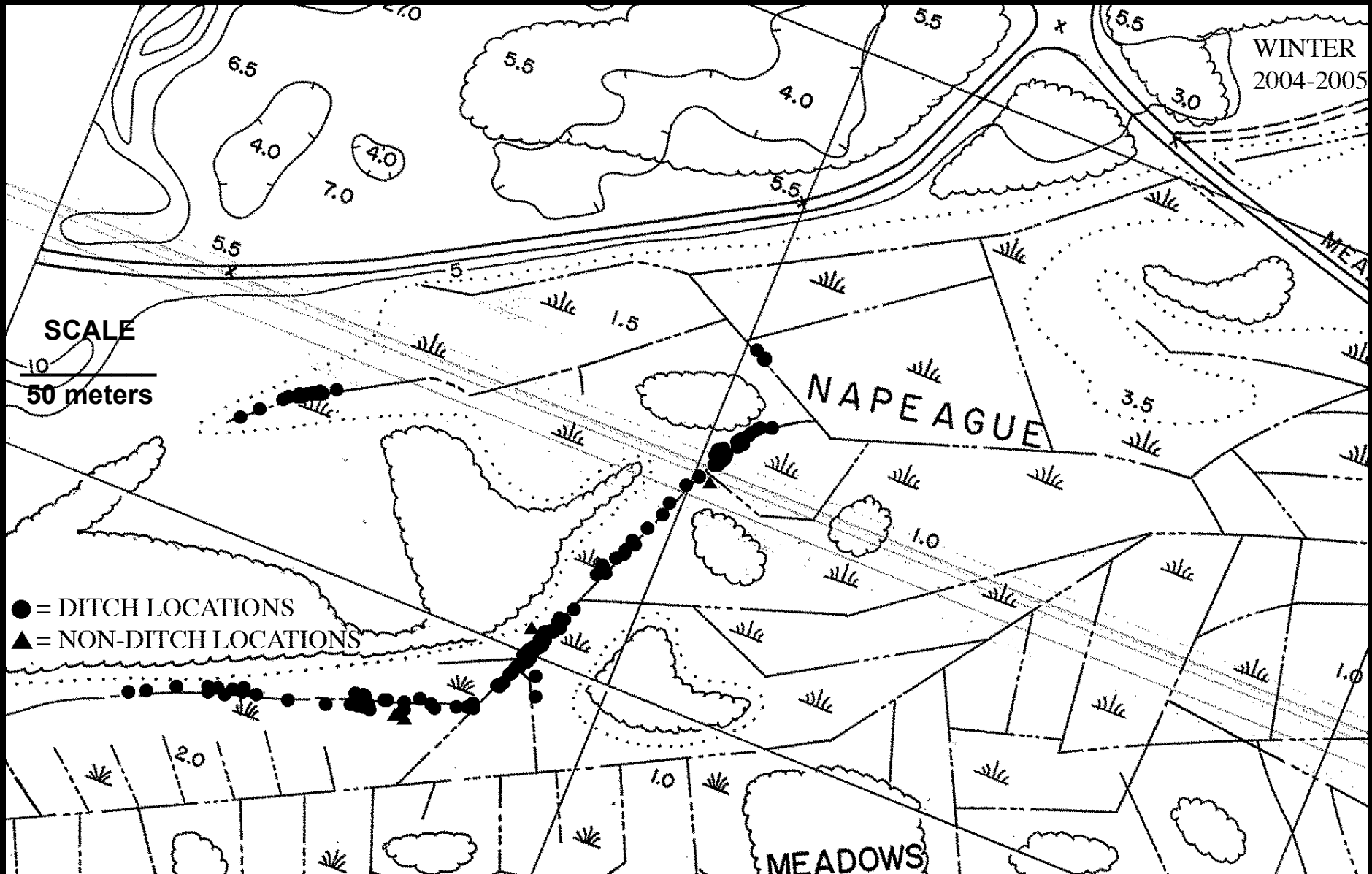
John Behler in a field near his home in Westchester County with one of his favorite species, the spotted turtle. (Wildlife Conservation Society)



Female [L1 R1] winter movements (239 meters from 12/8 – 3/8)

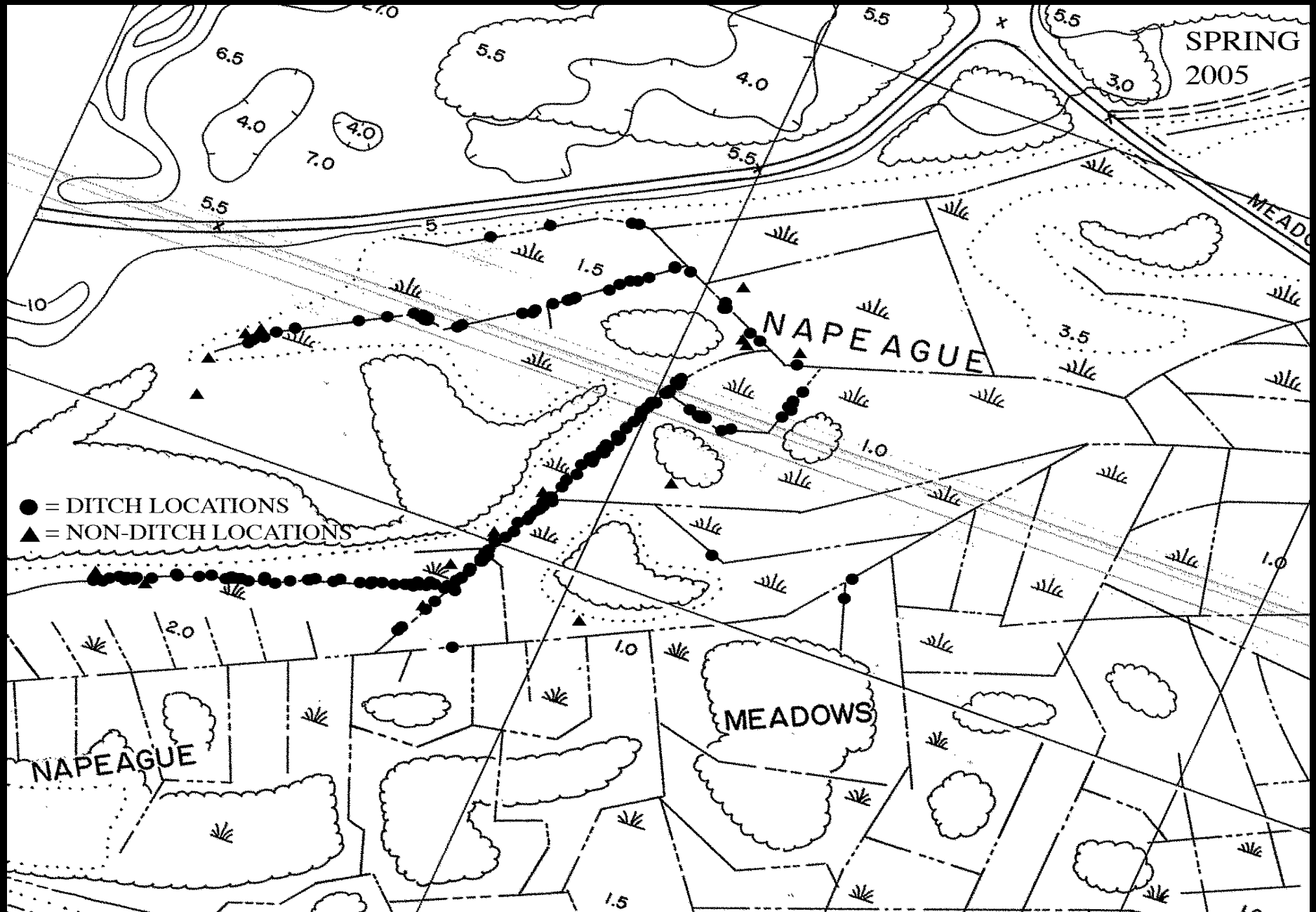


Relocations (159) of 8 turtles (4 males & 4 females)
October 21 – March 14
97% in ditches; average of 17 meters of travel per relocation

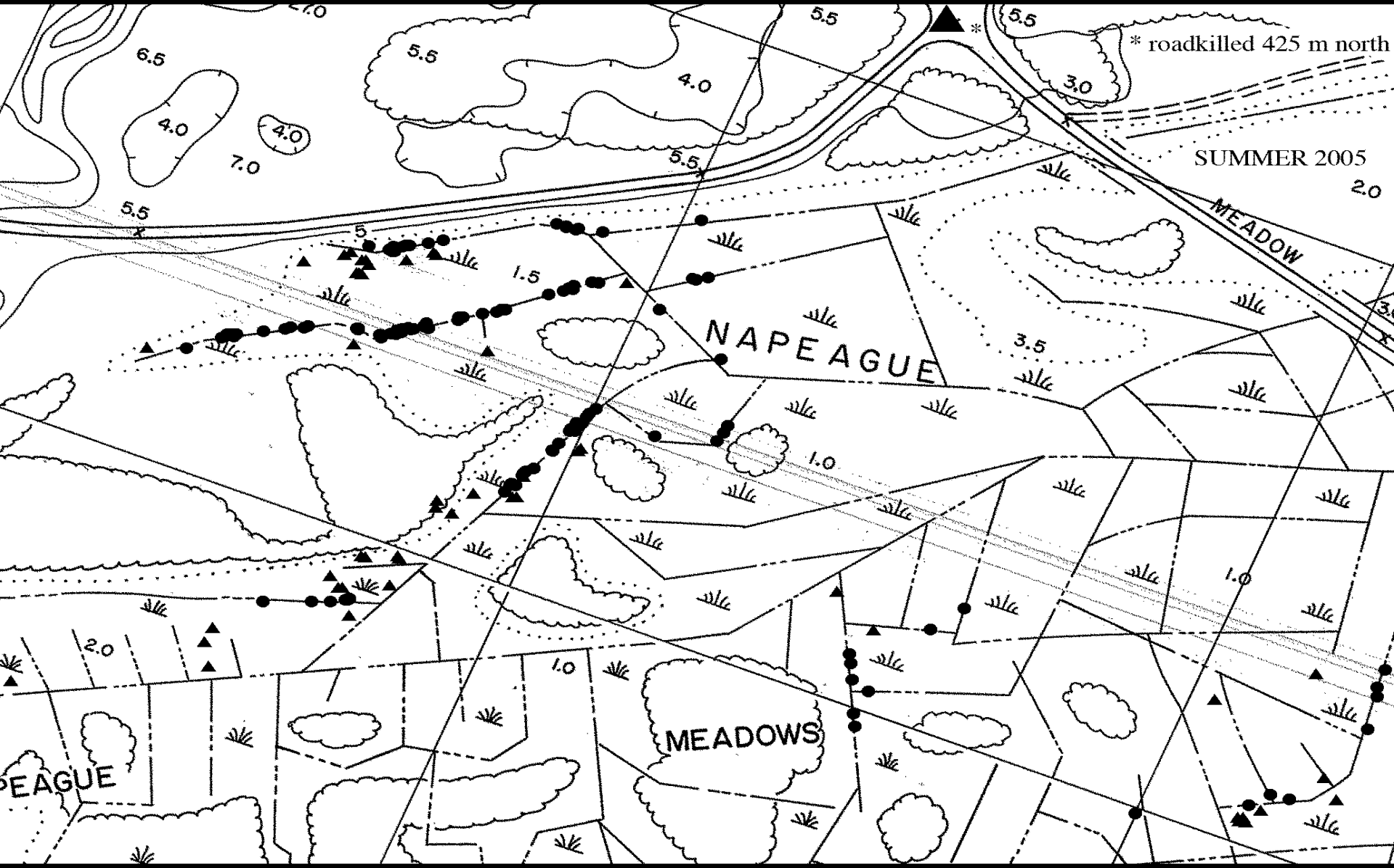



92% of relocations were in ditches needing “cleaning.”

Spring relocations (211) 92% in ditches



Summer relocations (154)



62% in ditches


Cranberry Hole Rd
Recapture
Released

CONCLUSION

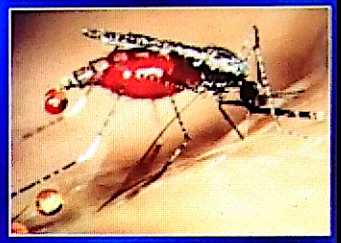
Spotted Turtles show a strong preference for mosquito-control ditches containing fresh and brackish water throughout the year..

Ditches containing emergent vegetation and leaf/twig debris are preferred over “clean”ditches.

These findings present a management challenge for the Suffolk County Department of Vector Control, which maintains the ditches.

A long-term management plan for this site needs to be developed by the county in conjunction with NYSDEC, the NYS Natural Heritage Program, and NYS Parks to prevent conflicts among mosquito-control programs, rare plant management efforts and turtle conservation.

Suffolk County Vector Control & Wetlands Management Long Term Plan & Environmental Impact Statement



Steve Levy, County Executive

Suffolk County Vector Control and Wetlands Management Revised Long-Term Plan

Prepared for:

Suffolk County Department of Public Works
Suffolk County Department of Health Services
Suffolk County, New York

Prepared by:

CASHIN ASSOCIATES, P.C.
1200 Veterans Memorial Highway, Hauppauge, NY

October 2006

DISCUSSION

Have ditches modified turtle behavior and movement by creating an artificial micro-environment in the marsh that makes hibernation and estivation unnecessary?

Salinity: do turtles move in response to salinity changes?

Why was there no trapping or hand capture success in the most consistently fresh portions of the study area's wetlands?

Where are the hatchling through age class three turtles?

The importance of basic ecological monitoring.

THANK YOU:

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