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MANAGEMENT PLANS FOR SIGNIFICANT PLANT AND WILDLIFE HABITAT AREAS OF MARYLAND'S EASTERN SHORE: WICOMICO COUNTY

APPENDIX C TO

FINAL REPORT

SUBMITTED TO:

Coastal Resources Division
Tidewater Administration

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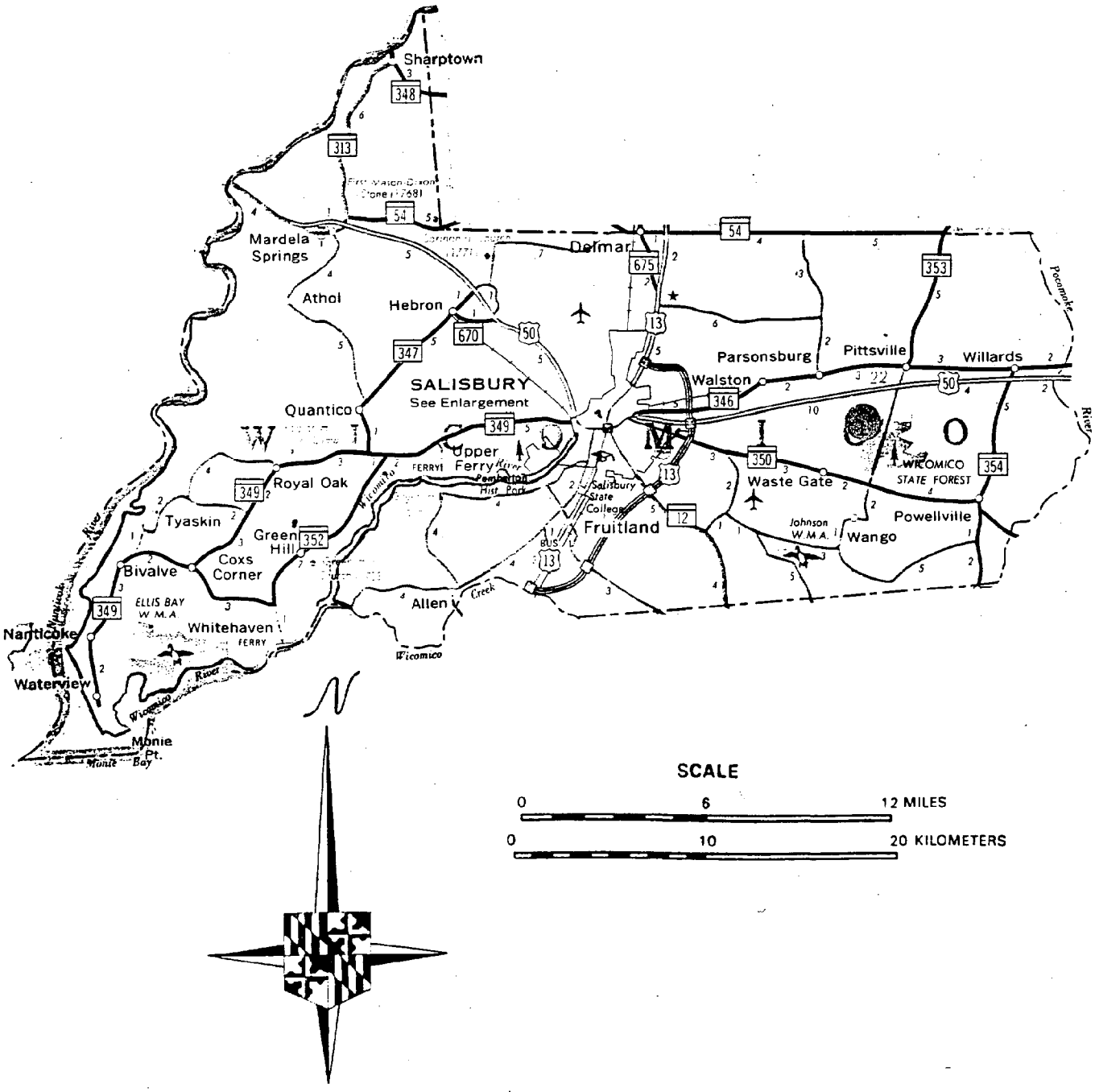
WICOMICO COUNTY



= Locations of Protection Areas of significant habitat. Sites are numbered in order from north to south.

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WICOMICO COUNTY: Protection Area Locations

Protection Area	Site # on County Map
Campbell Powerline	1

PROTECTION AREA SUMMARY

Protection Area Name: Campbell Powerline

County: Wicomico USGS Quad: Pittsville

SUMMARY OF ECOLOGICAL SIGNIFICANCE:

Campbell Powerline incorporates extensive wet sphagnous meadows dominated by Loose-headed Beakrush and Virginia Meadow-beauty, and grassy upland meadows. A large, vigorous population of a rare species occurs in the wet sphagnous meadows and, to a lesser extent, in contiguous grassy upland habitat. Half of the six populations of this species occurring in Maryland are located in Wicomico County. An uncommon species is a codominant in these wet meadows.

Naturally-occurring forest openings, created by flood or fire, once provided habitat for wet meadow species. Since these natural disturbances are now suppressed by man, species associated with wet meadows have become increasingly rare.

Water accumulates at the surface of the level, poorly drained soils at this site. The rare species at this site are uniquely adapted to this standing acidic water. Many non-native weeds can not invade these meadows because they can not tolerate acidic conditions. Powerline right-of-way maintenance prevents woody species encroachment.

OTHER VALUES AND SIGNIFICANCE:

Wet sphagnous meadows are valuable as breeding grounds for amphibians and provide forage for birds. Pine-hardwood forests to the southeast and northwest of the meadows also provide rich habitat for wildlife.

This wet sphagnous meadow is unusually extensive and may contain other rare species adapted to its unique conditions.

THREATS AND MANAGEMENT NEEDS:

Threats

Any alteration in the quantity, quality, or acidity of the water available to the wet sphagnous meadow could result in the elimination of the habitat and of the rare species within it. Logging of the wooded buffer and subsequent sediment runoff could reduce water quality and alter the topography of the sphagnous depression, lowering water levels in the meadow. Recreational

vehicle traffic on the sandy soils of the meadow could also change the shape of the sphagnous depression.

Changes in the acidity of the wet meadow may render it unsuitable for rare acid-loving species. It may also encourage invasion by non-native weedy species capable of outcompeting the rare species. Acidity may be affected by polluted surface runoff from upland forests or direct use of herbicides on the powerline right-of-way.

Maintenance of the vegetation cover within the right-of-way could prevent the rare species from sexually reproducing.

Management Needs

Logging should not occur within the protection area. The protection area within the powerline right-of-way should be inaccessible to recreational vehicles.

Management activities to remove woody species or non-native weeds should occur only after the rare species have dispersed their fruit, preferably from December through March. If herbicide use is necessary within the protection area, herbicides should be applied selectively by hand. Because of the vulnerability of the seep to physical damage, mowing should be avoided within the protection area. Efforts should be taken to minimize physical damage to the topography of the sphagnous meadow or to the rare plant populations during maintenance of the powerline right-of-way.

The size and reproductive success of these rare species populations should be monitored.

BOUNDARY RECOMMENDATIONS:

The secondary protection boundary encompasses rare species populations, a 100-foot buffer southwest and northeast of the population along the powerline right-of-way, and a 100-foot wooded buffer to the northwest and southeast of the population.

SITE DESCRIPTION SUMMARY:

Bordered on the northwest and southeast by immature Loblolly Pine-Sweetgum forests, this 33-acre protection area harbors a rich wet sphagnous meadow. Loose-headed Beakrush, Virginia Meadow-beauty, and the uncommon species are codominants in this meadow. Hummocks flanking this meadow support dense stands of Bracken Fern, Steeplebush, and Common Greenbrier. Tubercled Spikerush and Carolina Yellow-eyed Grass thrive in the inundated ditches running through the meadow.

Within these meadows, the rare species populations are widespread and vigorous, one occurring as a codominant. Some of the wooded buffer has been clearcut and is regenerating naturally. A gravel road transects the powerline right-of-way near the southern limit of the rare species' population.

Prepared by: Ann M. Rossheim

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