

Ecology Map Aids Planning

Ian Fein Thursday, January 13, 2005 - 7:00pm

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Released By Nature Conservancy, Sophisticated Color Blueprint Shows Diverse Habitats End to End on Island

By IAN FEIN

A detailed map that identifies all of the ecological habitats on the Vineyard was released this week by the Islands office of The Nature Conservancy. The map is the first of its kind for the Vineyard.

"People here know how important this place is, but now for the first time we have scientifically credible data that puts all of the Island's habitats in context," said Tom Chase, director of The Nature Conservancy Islands program. "Vineyarders can now know exactly how much of something they have that's both rare on the Island, and rare in the world as well."



(http://www.mvgazette.com/news/2005/01/14/content/nature_conservancy_map_lg.jpg)

The full color version of the map, which appears on the Gazette web site this morning at www.mvgazette.com (<http://www.mvgazette.com>), distinguishes between 20 distinct vegetation communities - ranging from the maritime shrublands of Squibnocket to the agricultural grasslands of West Tisbury to the red cedar woodlands of Chappaquiddick.

The Nature Conservancy data actually quantifies 50 different communities, which were narrowed to 20 to make the map simpler to use.

"A lot of people don't realize we have such incredible biodiversity for so small an Island," Mr. Chase said. "When you look at this map, it's really quite striking."

Mr. Chase and his colleagues spent three years researching and compiling the map. Biologists went out on foot to identify the makeup of certain habitats, which were then compared with aerial photographs to make larger projections. Once the map was sketched, biologists went out again to confirm the photographic findings.

"The first step was to figure out where everything is," Mr. Chase said. "Now we can determine where we need to try to protect and restore the regionally and globally important areas."

When the new vegetation map is overlaid with a map of all the Island conservation lands, strategic areas arise where organizations might want to concentrate their efforts. Nature Conservancy ecologist Kendra Buresch said that certain areas offer an opportunity to expand

rare native habitats - such as grasslands, heathlands and scrub oak - by connecting key plots of conservation land.

"I look at the Vineyard as a big jigsaw puzzle," said Dick Johnson, executive director of the Sheriff's Meadow Foundation. "And now this map will help us try to put together enough habitats of particular types that support species we think would have normally occurred there. It's a great long-range planning tool for land acquisition, but even more so for managing and restoring the land as we put the pieces back together."



(http://www.mvgazette.com/news/2005/01/14/content/nature_conservancy_down_lg.jpg)

Mrs. Buresch identified the central and southern sandplains in and around the state forest as a particularly high priority for protection and restoration. The map shows stretches of native scrub oak, interspersed throughout overgrown oak woodlands, that could be expanded and connected.

But while the map shows specific areas where organizations might want to target their conservation efforts, it also identifies areas where development would not pose as much of a threat to unique Vineyard ecology.

"This puts things in perspective," Mrs. Buresch said. "There are areas that make more sense for development, that are a lower priority for conservation."

Mr. Chase said initial concern was expressed both within and outside The Nature Conservancy that the map might make it easier for developers to build in certain areas. But he maintains that the map will help the Vineyard manage growth and development in a way that protects the most important areas.

In fact, the \$75,000 funding for the map came from a one-time golf course developer, the late M. Anthony Fisher, who had been involved in the early plans for Meetinghouse Golf on property near the Edgartown Great Pond.



(http://www.mvgazette.com/news/2005/01/14/content/nature_conservancy_edg_lg.jpg)

When a public controversy began to brew over the prospect of a golf course in an environmentally fragile area, Mr. Fisher reversed direction and pulled the plan, after listening to his critics. The Meetinghouse Golf land was eventually sold to The Nature Conservancy, which has since restored it to native heath and grasslands.

"We were collegial adversaries who became close allies," Mr. Chase said of the late Mr. Fisher this week.

"One of the high points of my professional life came at the end of the Meetinghouse Golf debate, when I got a letter from Tony that said after he learned The Nature Conservancy's intentions for the land, he felt it was in better hands," Mr. Chase recalled.

"He said that next time he wanted to be on our side, and he made good on his word," Mr. Chase said. "Tony felt strongly that the Island should be planning proactively instead of reactively, and that's exactly what this map will now allow us to do."

Mr. Fisher specifically requested the map be shared with the entire Island, hoping it would be valuable as a baseline document to help agencies plan for human uses as well as conservation.

"We hope it's a useful tool," Mr. Chase said. "We're contributing it, and Tony made it happen."

The Nature Conservancy recently donated the map to the Martha's Vineyard Commission, which added it to a series of other digital planning maps and sent them to all of the towns. When used together in a computer overlay program, the different maps offer an endless array of information that can be useful to planning.



(http://www.mvgazette.com/news/2005/01/14/content/nature_conservancy_wt_lg.jpg)

"Say a town was interested in protecting all stands of pitch pine greater than two acres located on town-owned land," said Christine Seidel, geographic information systems coordinator for the commission. "Using the vegetation map with an assessors overlay, you can find all of those specific locations."

As the MVC prepares to embark on its own three-year Islandwide planning effort, the maps represent an important step in regional conservation planning.

In the past each town conservation commission did its own planning using a vague "bubble map" that drew circles around areas where rare species were thought to exist. The new map will give them more accurate information about specific habitats, and will allow towns to see their vegetation in the context of adjacent towns and the Island as a whole.

The Vineyard map will also offer another layer of regional context when compared to similar maps The Nature Conservancy previously compiled for Nantucket and the Elizabeth Islands. Conservation organizations can now identify parts of the Vineyard that are unique not only for the Island, but also within the entire region.

In particular, Mr. Chase said that The Nature Conservancy created the term "Squibnocket moorlands" to identify the Squibnocket and Moshup Trail habitat because it exists nowhere else in the world.



(http://www.mvgazette.com/news/2005/01/14/content/nature_conservancy_up_lg.jpg)

Mr. Chase said The Nature Conservancy is now working on another overlay map that will show how different ecological processes - like soil types, wind, salt spray and fire - affect different habitats. The map will give conservation organizations yet another tool in determining where and how to restore natural habitats.

"I guess one of the things I really like about these maps is that they are working documents. You can constantly update the information," Mr. Chase said. "And I think for me that sort of symbolizes Tony's continued involvement in helping Vineyarders plan for the future of the Island."



Vineyard Notebook

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