c/o MARTHA'S VINEYARD COMMISSION BOX 1447, OAK BLUFFS, MASSACHUSETTS, 02557 508-693-3453 FAX 508-693-7894 INFO@MVCOMMISSION.ORG WWW.MVCOMMISSION.ORG

Natural Environment Work Group on Biodiversity Subtopic

Meeting Notes of February 23, 2007, 12 noon, MVC

<u>Present – Work Group Members:</u> Tom Chase (Core) (lead on Biodiversity), Matt Pelikan (Core), Tim Boland (Core), Marilyn Miller, Ronald Zentner, Rez Williams, Carlos Montoya, Luanne Johnson, Megan Ottens-Sargent <u>Present – MVC Staff:</u> Jo-Ann Taylor

I. Introduction

Tom Chase introduced the draft Biodiversity Summary and invited comment.

II. Comments on draft (with comments in italics, draft items in plain type to illustrate the basis for the discussion)

OVERALL PURPOSE

Restore and maintain the social and ecological conditions to support the Vineyard's human residents and viable populations of all its native species, both resident and migratory.

There was a suggestion to add a reference to people as a species, along with the usual flora and fauna.

ACTION STEPS, PRIOR TO IMPLEMENTING ANY STRATEGY, INCLUDE THE FOLLOWING:

- 1. Make sure you give sufficient background information, person-to-person, before presenting strategies to official decision-makers in public.
- 2. Set the regulatory context first (e.g. a DCPC), and use clear, specific language to show how your strategy and goal is linked to it.
- 3. Whenever possible, give examples of successes and reason for optimism, especially where biodiversity conservation results in benefits to humans.
- 4. Don't always rely on maps or similar graphics to convey a point; use more tangible images whenever possible (e.g. photographs of the species or problem of concern).

GOAL A: "A culture of stewardship"

The Vineyard's human communities understand the ecological, cultural and economic benefits of a healthy ecosystem and are informed and prepared to act on behalf of its restoration.

OBJECTIVES:

- 1. Quantify the minimum necessary levels of land and water area, and ecological processes.
- 2. State the current status of these conditions.
- 3. Key opinion-leaders and decision makers adequately understand the benefits of biodiversity and ecosystem services to our quality of life and economics.
- 4. Sufficient constituents are inspired to [vote, voice, purchase, and treat their own lands....] influence opinion-leaders and decision makers.
- 5. Outreach needs teeth such as the negotiation and discussion of site plan review setting the context and defining the parameters, remain clear about the goals instead of death by a thousand cuts, have restoration by a thousand sutures
- 6. Set the regulatory context to look at overall development, rather than reviewing projects strictly one by one.
- 7. Get people used to the idea to accept some cycles, not jump to technology.
- 8. Celebrate successes, little bluestem, e.g. that it's part of what's driving the success of our resort economy; gain enthusiasm a degree of hope, not just fatalism.

OBSTACLES:

- 1. The benefits and needs of biodiversity are not widely understood.
- 2. Land management for qualitative aesthetic and recreational purposes is often assumed to be sufficient to meet the quantitative needs of native species and humans.
- 3. Media may not be well enough informed.
- 4. There is often an assumption that biodiversity is in conflict with economic viability and with human wefare.
- 5. Many town boards are busy with project review, and don't often have the time to devote to planning.
- 6. Biodiversity is abstract compared to recreation, etc., more difficult for many people to understand or feel passionate about.

STRATEGIES:

- 1. Ensure that leading municipal officials and board members of conservation groups are familiar with the minimum areas and ecological conditions necessary to meet human and wildlife needs by.....
 - MVC staff mapping minimum viable areas with associated land-use benefits to humans and wildlife, delivering the maps to key leaders, and using the maps to guide sub-strategies (land conservation, undevelopment, native plant landscaping, zoning regulations, waste treatment, trails, fishing access, etc.)
 On mapping problems are coming from outside what is regulated on that spot the impacts of what's going on somewhere else watershed, e.g. map indicator species, see what happens to that species, like eelgrass in the ponds maybe vote on what is the indicator species –
 - Produce an interactive map with habitats keyed to regulations; superimpose layers of different colors of intensity of protection as the layers are added.
 - Hold "best practices" fora for conservation commissions especially where biodiversity conservation results in benefits to humans.
 - MVC could establish a natural resources committee, making sure that biodiversity conservation is its mandate (even for now, LUPC could look at biodiversity goals and make sure that they are part of project review.)
 - Take advantage of community "learning moments" by hosting experts to speak on important issues as they become topical. (Examples given included when a moth outbreaks prepared the community to receive information on both alien species as well as well as the impacts of biocides). One suggested means of doing this: the MVC invites experts on subjects to speak as learning moments arise; possibly to be funded by a grant from a local foundation. Use incidents of degradation recent shellfish closures, e.g. to adopt regulations specific to things that have happened stockpile regulations, then take an opportunity to use a cataclysmic event to get the regs accepted. Use conflict as an opportunity to get people to understand.
 - Media could be more helpful if better informed invite involvement of the press
 do an article on someone who's done native landscaping for one of the magazines, e.g.
 - School curriculum a biodiversity class in high school, and down to preschool?
 - Create Island branding through A) a community contest for the Island's most characteristic bird, plant, mammal etc. – preferably ones that also serve as indicator species for the health of key habitats/ and key ecological attributes; and B) high profile market for Vineyard native-plant landscaping designs and principles –

- consumers can check off "I want the vineyard brand of landscaping" for trophy houses, e.g.
- Get the time from the boards to educate them; talk to boards about how keeping from fragmentation, etc. can actually be beneficial for people too (help to prevent lyme disease, e.g.) Take current literature on how other communities have made peace between biodiversity and economic development – bring evidence.
- Raise awareness, then translate that into action; get something on warrants for town meetings to catch dialog, even if it's not voted – put out even a crazy idea – use the existing system to get things going – get on the agenda for Conservation Commissions, Planning Boards, etc. to get them talking – cast a wide net.
- 2. Build a constituency to advance minimum viable areas and ecological conditions by.....
 - Distribute a version of the same maps to schools, public places, modified with specific voluntary actions land-owners can take (native plant landscaping, sale of remainder interests, installation of de-nitrifying septic systems, etc.) and what the cumulative benefits will be (shellfish harvest, clean drinking water, etc.).
 - A public panel (MVC + conservation representatives? VCS?) Make two annual awards, when warranted, to a) a public leader and b) a citizen who make the greatest contributions towards the goals of minimum viability; coverage in local papers and other media on recipients. Examples might be a selectman who advances favorable zoning or waste regulations, or a private citizen who sells a remainder interest in his property at a bargain sale.
 - Don't always rely on maps or similar graphics to convey a point; use more tangible images whenever possible (e.g. photographs of the species or problem of concern).
 Use different outreach approaches to reach different constituents; grab the attention of a wide range of people who sit on boards and who talk to board members, and who vote.

GOAL B: "Ecosystem services and ecological process"

OBJECTIVES:

- 1. Minimum viable habitats
- 2. Water purifications and supply
- 3. Wildfire protection and natural disturbance regime
- 4. Storm surge protection and coastal resiliency

- 5. Harvestable populations of fish, shellfish and wild game
- 6. Quality of life and resulting personal, cultural and economic benefits

OBSTACLES:

- 1. Habitat fragmentation
- 2. Excess nitrogen from atmospheric deposition, septic systems and lawns
- 3. Fire suppression
- 4. Non-native landscapes
- 5. Invasive species disjointedness between regulations and what to do about invasives. State regulations regarding propagation and reintroduction of plants, and interpretation of those regulations, are sometimes at odds with community objectives.

STRATEGIES:

- 1. See #A1, above.
- 2. Establish a tax on lawn size and N-loading septic systems; use the funds to abate directly and proportionately relevant impacts and to advance goals, e.g.: a) make 0% interest start-up loans to Island nurseries to grow and provide a sustainable stock of native landscaping plants, b) subsidize the private conversion of lawns to native plant landscaping and the restoration of areas infested with invasive plants, c) subsidize the private conversion to denitrifying septic systems, and d) partially fund shellfish stocking of Great Ponds to help with removal of excess nutrients and provide a sustainable harvest.
- 3. Expand the Land Bank/Nature Conservancy "undevelopment" model by purchasing remainder interests with tax-exempt bonding.
- 4. [need a strategy the advances land protection in ways that are not already being met]
- 5. [need a fire strategy]
- 6. [Need a storm-surge/coastal resiliency strategy here innovative collaboration with insurance companies and coastal landowners?]
- 7. Begin to talk to each other about how to get the regulations changed or at least use the Vineyard as a model that works Cooperate with State agencies on a model project to demonstrate ways in which reintroduction, restoration and landscaping can be coordinated to overcome key threats, such as habitat fragmentation.

GOAL C: "Viable populations"

OBJECTIVES:

- 1. Maintain and enhance existing populations in natural habitats
- 2. Restore natural communities
- 3. Reunite necessary functional connectivity within and between communities
- 4. Buffer human landscape impacts
- 5. Reintroduce extirpated species where ecologically necessary and legally appropriate

OBSTACLES:

- 1. Habitat fragmentation, conversion and loss
- 2. Interruption of natural disturbance regimes (especially fire)
- 3. Altered soil characteristics
- 4. Invasive species and
- 5. Non-native and/or hyper-abundant predators

STRATEGIES:

- 1. See strategy A1.
- 2. See strategies B3, B4, and B5.
- 3. TNC and Marine Biological Laboratory to research soils impacted by farming and suburbanization and to recommend restoration techniques to make them suitable to wild plants again.
- 4. [] to research biologically effective and socially-acceptable means of limiting the impacts of hyper-abundant and non-native predators (especially skunks, raccoons, cats).
- A [directly and proportionately relevant tax] subsidizes the recommendations of strategy C2, and as well as efforts to restore and reintroduce viable populations of key species.
- Utilize Community Preservation Act funds for native plant communities or native plantings.
- 7. Also for areas that were deliberately planted with invasives (windbreaks of Russian Olive) at (one time supplied by the soil conservation service) a mechanism for their removal and reparations (native plants provided at low cost or subsidized) for replacement.

POSSIBLE BOLD IDEA:

 Route greenways to help link and expand minimum viable areas, and to minimize human-use disturbances near core conservation areas

POSSIBLE SHORT-TERM STRATEGIES:

- Polly Hill Arboretum is in the process of developing a monitoring group for invasive species.
- Offer a seal of approval for landscapers have them trained on invasives, and be awarded a certificate (Note that Tim offered that they already know more about invasives than most Vineyarders).
- Make available to private landowners the non-biocide thermal weed killer to remove invasive species (similar to the one at the MV Golf Course).

III. Next Meetings

- Character March 5, 12-1:30 at MVC
- Core Wednesday, March 7, 11:00 A.M., upstairs at MVC review work group progress

Notes prepared by Jo-Ann Taylor