

EXHIBIT A

Public Hearing. Meeting House Golf Club, LLC.

The Martha's Vineyard Commission held a Public Hearing on Thursday, January 28, 1999, at 7:30 p.m. in the Old Whaling Church (Methodist Church), lower level, Main Street, Edgartown, Mass., on the following Development of Regional Impact:

Applicant: *Martha's Vineyard Golf Club and
Meeting House Golf, LLC
218 Speen Street
Natick, MA 01760*

Location: *Between Meetinghouse Way and Edgartown Great Pond, on Edgartown Assessor's Map 27, Lots 13.1, 13.2 and 8.1, and Map 38, Lot 8.*

Proposal: *To construct a private, members-only golf club with appurtenant uses, such as a clubhouse containing a pro shop, cart storage, locker rooms, a restaurant, bar, administrative offices, a maintenance building, staff housing, pump houses and rain shelters.*

Mr. Donaroma read into the record the Notice of Public Hearing for the Meeting House Golf Club, LLC (above). He noted that a copy of the application and plan were on file at the Commission offices for public inspection and that written testimony could be submitted prior to or during the hearing. He added that the hearing was held in accordance with Section 14 of Chapter 831 of the Acts of the Commonwealth of 1977, as Amended, and Chapter 30A, Section 2, of the General Laws of the Commonwealth, as modified by said Chapter 831.

Mr. Donaroma welcomed the audience. He noted that there would probably be more than one hearing for this project, so that everyone would get "his shot." Mr. Donaroma then outlined the Public Hearing procedure: Applicant presentation; staff report; comments from Town Boards; comments from public in favor; comments from public opposed; and comments from the public in general.

Applicant Presentation.

Rosario Lattuca, Applicant.

Mr. Lattuca, Applicant, said that he and his son, Barry, proposed to build the golf club off West Tisbury Road in Edgartown. The area, he noted, was also known as the MacKenty/Bigelow property. He and his son had been in the golf business for over a decade.

Mr. Donaroma interrupted and asked the audience if all could hear Mr. Lattuca. The latter's position and the microphone were adjusted, and he continued.

Mr. Lattuca said that he'd dreamed of building this course for the last four years and that there was no place else on earth he'd rather build one. He said that he and his family would keep the Bigelow house to live in but would move it elsewhere on the land.

Mr. Lattuca went on to say that with the help of Dr. Arthur Gaines (scientist, Woods Hole Oceanographic Institution) and Kelly Cardoza of Avalon Consulting, he and his son had assembled a team of esteemed scientists, engineers and naturalists to study the property for the past year. The results of those studies were on file with the Application. He also thanked the staff of the Martha's Vineyard Commission (MVC) for reviewing all this

material for months. Finally, he thanked the Martha's Vineyard community as a whole for all their suggestions.

Jeremiah (Jerry) MacKenty, Property Owner.

Mr. MacKenty told the Commissioners that he would like to read a statement on behalf of his brother, John MacKenty, his sister, Kay Bigelow, and himself.

The statement included, among other things, the following: that the property had been purchased by Mr. MacKenty's father in 1941; that he and his siblings liked the idea of the land's being used as a golf course, particularly this one; that the family had had other offers, some for below market value, others for more that were nonetheless unacceptable because of the degree of development that they required; that his brother, John, had agreed to sell a portion of his land which had no environmental significance if there were a guaranty that it would remain open land forever; that the Applicant had readily agreed to the family's request that there be no residential or other development; that the family had utter confidence in the Lattucas' commitment to an environmentally sensitive development; that views of Meshacket Cove that had been available to his family for years would now be open to the public; that it was no longer viable for the family to maintain the lands; that the Lattucas had the right to purchase the land of Mr. MacKenty's sister and himself, but not his brother's, if the permits for the golf course were not granted.

Mr. MacKenty said he hoped that the Commission would give the proposal their careful consideration and that they would approve it. He ended by thanking the Commission for listening.

Mr. Lattuca returned to the podium and again appealed to the Commission to approve the proposal. He said he knew the golf course would protect the environment, support local causes and be a good neighbor to the Island as a whole.

Kelly Durfee Cardoza, Avalon Consulting, East Taunton, Mass.

Ms. Cardoza began with an outline of that evening's presentation. She herself would intended to go over the operational aspects of the club. Graham Wyatt would talk about architecture, and she would talk about the technical studies. Dr. Gaines would review the Great Pond Center. The public benefits would be addressed by Bob Mone and Herb Putnam. Finally, Ms. Cardoza would give a summation.

Operational Plans.

Ms. Cardoza discussed the fact that the Lattucas wished to develop a championship-level golf course that accomplished several goals: to provide public access to land that had always been private; to improve views onto the property from the Great Pond; to remove nitrogen-rich groundwater from beneath the ground that would have ultimately discharged to the Great Pond; to create a new, well-endowed charitable foundation for all the Island; and to put into place permanent institutions and mechanisms to insure the health of the Great Pond forever.

Ms. Cardoza's presentation was accompanied by graphic illustrations provided with an overhead projector. She showed a topographical outline of the property and said that the Applicants proposed to construct the golf course on a portion of the 200-acre site. She discussed which areas would be left untouched, including the wetlands and the 100-foot buffer zone (the shoreline conservation land), and the boundaries of the property.

Ms. Cardoza explained that the proposed club would have a small membership, 250 members plus 200 Island members, the vast majority being Island residents or homeowners. Island members would be able to play after 4 p.m. during the peak season and at all other times during the shoulder and off seasons.

It was the MacKentys and the Lattucas' goal, she said, to have no housing development. Since virtually all the members would already live on the Island, it was not expected that the club would add to the housing demand. There would be no accessory guest housing, no pool or tennis, and the restaurant would not be open to the public.

Ms. Cardoza said that peak season for the course would be mid-June through mid-September. The club would be nonprofit, but it would pay its full share of taxes. Four to five full-time employees and 45 to 50 seasonal employees were expected to be associated with the club.

Ms. Cardoza then displayed a plan of the golf course. She pointed out that there would be no golf near Kanomika Neck, the wetlands and the buffer zones, which comprise 47 acres of the land and more than 5,000 feet of shoreline. The course was designed by Fazio Golf Course Designers, Inc. (of Henderson, North Carolina), and Ms. Cardoza noted that Tom Griswold of that firm was in the audience that evening. The design had limited the acreage of maintained turf so that the quantity of water needed to irrigate as well as the amount of fertilizer required would be kept to a minimum.

Ms. Cardoza outlined the site access, including an unpaved entry drive. There would be no paved roadways or parking areas. There would be 60 unpaved parking spaces at the clubhouse and 40 additional ones at the maintenance facility. She said that Mr. Wyatt would be going over the actual architecture in more detail.

The access to the Great Pond Center, which would be Jerry MacKenty's house, and to the homes located on Kanomika Neck would be relocated through the course and then reattached to the existing roadway. She pointed out where the Bigelow house would be relocated, where, incidentally, it would no longer be visible from the Great Pond.

Ms. Cardoza explained that one of the major public benefits would be that the public would have access to a site previously inaccessible. She discussed how this would be accomplished.

Ms. Cardoza stated in summary that the club's operational plan called for a golf course only, with no housing, a small membership, a green open space and the preservation of 47 shoreline acres. She then turned over the podium to Graham Wyatt.

Graham Wyatt, Partner, Robert A.M. Stern Architects, New York.

Mr. Wyatt began by pointing out that there were only to be a few structures associated with the project and that the way the architecture team did its job sent an important philosophical message. He then supplied some background information about his firm, including the three Martha's Vineyard projects they had worked on over the past 20 years. More significantly, the firm had a basic philosophy that buildings should not be "faddish or trendy" and that they "should not reflect the ego of any individual but rather they should say something about the architectural traditions and the history of the place in which they are built."

Mr. Wyatt explained that there would be seven structures associated with the development, including two rest/storm shelters; a small pump house structure at the center of the site; a necessary maintenance facility near the entrance; the Bigelow house, which would be moved from a prominent spot on the cove; the Beriah Weeks House (1789), which would not be moved and would be the site of the Great Pond Center; and the clubhouse itself, a single-story building of slightly less than 20,000 square feet.

The meadow near of the clubhouse, a fine botanical example of a northeast grassland sandplain, would provide "a beautiful forecourt" and would be preserved. He discussed this further. Mr. Wyatt then explained how the location of the course was designed to

keep the playing away from the wetlands and the water and that there would be no view of the clubhouse from the water.

Mr. Wyatt outlined the design of the clubhouse, which has an entrance drive designed to approach it casually, with a vehicular dropoff in front, 60 parking spaces in an open, graveled lot. The building itself was one story, broken down into a traditional series of wings. The new landscaping materials -- pitch pine and post oak trees, woody shrubs, sea plums, cinquefoils -- are ones that one would find on the site already. There would be a maintenance structure, essentially a barn, like the clubhouse, 28 feet in height. Beside it would be 40 unpaved parking spaces for employees and an enclosed area for maintenance vehicles. There would also be a two-story administrative office tucked into the clubhouse.

All the buildings so far discussed, Mr. Wyatt said, would be wood-frame construction, wood shingle, a certain amount of wood trim, a limited amount of natural stone for retaining walls, in addition to materials already native to the site.

Mr. Wyatt showed elevations of the existing Bigelow and Beriah Weeks Houses, as well as of the pump house and the rest stations. He briefly went over the floor plans of the clubhouse in addition to two perspective views showing that the height of the tree line exceeded the tops of the buildings.

Mr. Wyatt said in summary that the buildings would certainly be in the tradition of Vineyard architecture. He then turned the podium over to Ms. Cardoza.

Kelly Cardoza, Avalon Consultants.

Ms. Cardoza introduced the members of the project team who were in the audience, among them Dr. Arthur Gaines, Ph.D., who with a decade's experience of studying the Great Pond provided oversight for the project; Dr. Stuart Cohen of Environmental & Turf Services, Inc., Wheaton, Maryland, who directed the risk assessment for the project; Michael O'Connor, also of Environmental and Turf Services and a certified golf course superintendent and turf agronomist who did the turf management plan; Jesse Schwalbaum from Earth Tech, who did the groundwater work; Doug Cooper from the Vineyard, who did the abutments delineation; Doug Hoehn of Schofield, Barbini & Hoehn, who did the surveys and engineering studies; Vern Laux of Oak Bluffs, who did the breeding bird study; Mark Mello from the Lloyd Center for Environmental Studies, who did the moth analysis; Mario DiGregorio and Pam Polloni of Buckley Botanical Consultants, who did wildlife and botanical work; the crew from Public Archeology Lab, Inc.; McDonough & Scully, who did the traffic assessment; and Graham Wyatt of Robert A.M. Stern Architects.

Earth Tech did the engineering, Jeff Norton did the local counsel, Hill & Barlow was also legal counsel, and Fazio Golf Course Designers, Inc. designed the course.

Ms. Cardoza pointed out the "remarkable track record" of the group in designing environmentally responsible golf courses, over ten of them recognized nationally for the sensitivity of the design.

Ms. Cardoza offered as part of the record the environmental studies and the project overview composed by the team. Copies of these documents, she added, had been placed in the Tisbury and Edgartown libraries.

Ms. Cardoza explained that this was the 36th design, that it had been vital that the design work around the environmentally sensitive areas. She showed, for instance, how the tees was designed to avoid the purple needle grass in the area and how the routing paths had been changed to avoid the wetlands.

She went on to explain how Public Archeology Lab, Inc. had completed an archeological survey that included 180 subsurface tests across the site over 40 man-days. She discussed further the cultural resources uncovered, including the Meshacket Cove Prehistoric Site, the Andrews-Vincent Historic Site and the Beriah Weeks House. There would be no impacts of the first two and very minor changes on the third of these sites.

Ms. Cardoza outlined the wetlands study done by Doug Cooper of Cooper Environmental Services and Mario DiGregorio of Buckley Botanical Consultants. The study was based not on vegetation alone but also soils and hydrology. She discussed the study further.

She said that Doug Hoehn had provided a "very accurate" survey, which she projected on the wall. She went over the types of vegetation in each area. An erosion and runoff control plan was also drawn up.

The wildlife and vegetation study, done throughout the 1998 growing season, both day and night, was accomplished by Buckley Botanical Consultants, Vern Laux of Oak Bluffs, Mark Mello of the Lloyd Center, who studied the moss in the area. As a result of this work, a series of maps was generated that documents the plant communities, the habitat assessment, the State-listed plants, the breeding bird study and the moth habitat study. Ms. Cardoza discussed the extent and depth of the studies done. It was concluded, she said, that 78 percent of the site is general habitat, 7 percent is wetlands and 14.3 percent is exemplary habitat.

Ms. Cardoza acknowledged David Wessling of the MVC, who assisted Tom Griswold at Fazio with the design of the routing patterns that would avoid the most environmentally sensitive areas. These areas include: the New England maritime forest area; the brackish cove shore; the New England pitch pine/scrub oak barrens; the New England coastal saltpond (Edgartown Great Pond); and the New England sandplain grassland area.

Ms. Cardoza went over the breakdown of the habitats in great detail and the State-listed flora and fauna that would be protected. She added that the portions of the site that would impact groundwater were designed carefully. Removal of some of the wooded areas of the site and the construction of birdhouses throughout the golf course would increase the diversity of birds on the site. The moth habitat, a two-acre parcel, will be untouched. Any pitch pines on the site would be transferred or replaced. Twelve additional acres of sandplain grassland would be created.

Ms. Cardoza said there would be no lighting within 100 meters of the best moth habitat area. The only lighting would be that required by building code, and since there would be no golfing at night, there would not be lights on the property after dark. In addition, what lights there were would be restricted to the yellow and red range.

Ms. Cardoza explained that no pesticides would be used within 100 feet of the wetlands. She discussed this issue further.

Ms. Cardoza said that the issue of dust raised on Meetinghouse Way had been an issue. The consultants spoke with Larry Mercier of the Edgartown Department of Public Works, and the Applicants agreed 1) to return Meetinghouse Way to its existing conditions and 2) to provide \$1,000 per year funding for environmentally sensitive dust mitigation measures for the road. Ms. Cardoza discussed a traffic assessment done on the area and said that this study was part of the file and available for public inspection.

Ms. Cardoza continued with a discussion of the plans for fire protection, including adequate vehicle access, Fire Department-approved hydro locations, and sprinkler systems in the clubhouse and the maintenance facility.

With regard to population and schools, the effect would be negligible, as previously discussed. In addition, a caddie program would be offered, and the golf course would

provide a place for the high school golf team to play. As part of the community partnership, there would be a financial commitment to the environmental education programs at the Great Pond Center, as well as a commitment to the Performing Arts Center.

As far as wastewater generation is concerned, flows on the site consistent with Title V had been calculated, said Ms. Cardoza. She spoke of the soil evaluation done by Schofield, Barbini & Hoehn, which also did the wastewater disposal system. She then discussed the use of the Bio-Clear system in the clubhouse and the maintenance facility, as well as the proposed enhanced nitrogen removal system.

Ms. Cardoza explained a table from the study of nitrogen, reported in pounds per year, comparing the current nitrogen levels with levels projected for the golf course scenario as well as for the housing alternative. The golf course was clearly the best of the three options, she noted. She also discussed the nitrogen loading recommendation for the Great Pond established by the MVC in 1998 and the projected nitrogen load contribution by the golf course. The conclusion of the study commissioned by the Applicant was that the project would have no negative impact on the Great Pond.

Ms. Cardoza also discussed the long-term monitoring plan for the groundwater and the Great Pond, testing for pesticides and nutrients. The results would be fully reported to the Great Pond Center, to the Board of Health and to the MVC. Ultimately, if it is found that the golf course is causing harm to the Great Pond, then it would be shut down, she insisted.

Ms. Cardoza then ceded the floor to Dr. Arthur Gaines.

Arthur G. Gaines, Ph.D., Scientist, Woods Hole Oceanographic Institution.

Mr. Gaines introduced himself as a Ph.D. in oceanography and a bachelor's degree from Cornell in biology and geology, who has had an interest for more than 20 years in the technology that could be used to improve the management of the coast. He expressed his initial uneasiness, which had been dispelled after his first discussions with the Lattucas and their hiring him as a consultant.

Dr. Gaines said that he set out five conditions that would be necessary if he were to be involved in the project: 1) environmental considerations must be the highest priority; 2) environmental aspects must be incorporated into the project from the very beginning; 3) the best available scientific and technical information would need to be incorporated in the project from start to finish; 4) an intensive, skillfully planned monitoring research program, administered by the Great Pond Center, must be established to ensure that all the planning would in fact be realized in the operational phase; and 5) the institution of an adaptive management process, meaning the management of the golf course would be subject to ongoing review forever.

Dr. Gaines pointed out that his participation in the project differed from that of the other consultants, who focused on the disciplinary aspects of the golf course: plants, animals, groundwater, and so forth. Dr. Gaines himself used a natural systems approach, looking at the whole system. He discussed this approach in some detail.

A major subsystem of the whole system, he said, was Edgartown Great Pond; another one was the golf course. He said it was his task to determine which parts of the subsystems should interact and which should be kept separate. The whole project covers 0.4 percent of the Island, the turf-managed portion, about half of that. His study, he said, included the viewpoint of the so-called stakeholders, all those who would be affected by the development, which would include everyone on the Island.

Dr. Gaines explained that the pond issues fall into three categories: 1) environmental ambience; 2) environmental management; and 3) the fishers management. He then discussed these categories in detail. Two overriding considerations were that the success of all planning would depend upon the Great Pond Center and the adaptive management system that would spring from it; and that the golf course would have to be visually separated from the Great Pond.

Dr. Gaines said that he had also studied the 60 acres of fragmented lands surrounding the proposed golf course and the effect of the project on those.

The environment aspect of the project are controlled by three kinds of materials, he said: fresh water, nutrients and pesticides. He outlined the model he had used to study the relationships among them. He then discussed these issues in some detail.

Dr. Gaines said that he had concluded that there would be no harmful environmental impacts, that in fact, reducing the amount of fresh water that entered the Great Pond would raise its salinity, which currently gets much too low in the summertime. He added that it was quite possible that oyster growth would be enhanced.

Dr. Gaines then discussed the nutrient budget and the "catastrophic" bloom in the Great Pond in 1993 when 90 percent of the oysters were lost. He explained that his solution at that time was to install an interceptor well upstream of the pond. He spoke of the costs and logistics of such a well, and he said he had seen an opportunity to carry out this plan when the golf course project came up.

Dr. Gaines then discussed in some detail the major benefits that the golf course would have on the nutrient budget, making his points with numerous graphs and tables. This included some discussion of the effects that a housing development would have by comparison.

As far as the pesticides budget was concerned, Dr. Gaines explained that with intense monitoring any adverse impacts would be spotted and modifications could be made to eliminate the problem. The pesticide plan, he said, had exhausted all nine chemical approaches first and was using instead a "sub-air" system that would manage the turf so it wouldn't need the addition of so many chemicals.

Dr. Gaines didn't see a direct impact by the golf course on the local fishery. Ironically, if the oysters are growing well, he said, that would enhance the environment itself.

Dr. Gaines then summarized the benefits of the projects, which would be: the creation of substantial conservation lands; an acceptable positive impact from water use; an acceptable or very positive impact on the nutrient budget; the close monitoring of pesticide use, which would not be the case otherwise; the creation of the Great Pond Center; and the absence of any cost to the taxpayer.

Ms. Cardoza took the floor to summarize the public benefits associated with the project, which were: 1) public access to the conservation areas; 2) the conservation restriction on Kanomika Neck; 3) the development restriction and limiting the site use to a golf course only; 4) 99.4 percent of the site left as green, open space; and 5) the community partnership program.

Ms. Cardoza then introduced Herb Putnam and Bob Mone, who would address the last benefit.

Herb Putnam and Bob Mone. Community Partnership Program.

Mr. Putnam referred to the Meeting House Golf Club's responsibility for fulfilling the affordable housing requirements established by the MVC. The Community Partnership

was being developed, in part, as a creative solution for meeting those requirements, he said. Mr. Mone hoped that the partnership would create a reciprocal bond between the community and the project. He said that he believed that the approval should be the beginning of the partnership project and not the end.

Mr. Mone continued that the premiere aspect of the partnership was the housing component. Together with the Dukes County Housing Authority, the partnership proposed a model that addressed three areas of urgent and continuing actions found in the MVC Regional Policy Plan. An initial cash contribution of \$300,000 would be earmarked for two projects, the first being a second-loan program for low-income families.

Mr. Putnam continued the presentation. He said that the second project would be a multiple-family rental unit on land owned by the regional housing authority. Since there is no staffing and no source of funding for the housing authority, this would be an invaluable help to the handling of the housing problem on the Island, said Mr. Putnam. In addition, \$10,000 a year would be provided for a staff member one day per week for one year and would be adjusted for the rise in the cost of living every five years.

Mr. Mone took over. Additional contributions would center on Island youth, health, arts and historical resources. Mr. Putnam outlined a donation of \$25,000 to the Martha's Vineyard Preservation Trust for the restoration of a historical rose trellis in the gardens next to the Vincent House. Another \$25,000 would go to Hospice of Martha's Vineyard for pure operational expenses, plus a 10-year commitment for \$10,000 per year.

It was back to Mr. Mone. The Performing Arts Center would receive a much-needed concert grand piano and funding for lighting and curtains. The Boys' and Girls' Club's mortgage of \$90,000 would be retired by the partnership, freeing up funds to do other projects. The Martha's Vineyard Arena would receive a contribution of \$100,000 that would enable them to complete the construction of that facility.

Mr. Putnam said that the partnership would continue an annual contribution of at least \$100,000 to the endowment for capital construction projects or operational programs. The project would also continue to fund the Great Pond Center with about \$100,000 per year.

Mr. Mone hoped that the partnership would serve as a model for future developments, and he emphasized the commitment to the future of the Meeting House project. He thanked the audience for their attentiveness.

Kelly Cardoza. Summary of Applicant's Presentation.

Ms. Cardoza summarized by saying that the proposal was a good one for two reasons: 1) it would not have any significant environmental impact; and 2) there would be numerous public benefits as a result of the project. She then discussed these aspects briefly and reiterated the advantages of the Meeting House proposal. She invited the public to ask questions at the appropriate time and said that she welcomed the public's input on the project. She thanked the audience for their "indulgence."

David Wessling. Staff Report.

Mr. Wessling began by complimenting the project's scientific team on the thoroughness of their approach. He emphasized that one was not just talking about a golf course but far-flung impacts that should and must be mitigated.

Mr. Wessling outlined the contents of the staff report, including appendices containing a studies by MVC staff members Andrew Grant and Bill Wilcox, as well as a sample of the over 60 letters received from the public.

Introducing another theme into the discussion, Mr. Wessling said he wished to contest some of the assertions and some of the methods employed by the project's team. On the topic of the topography of soils, for instance, he said that there were be a considerable amount of clearing at the site. Mr. Wessling thought that the soil erosion plan was a good start, but that more work would be needed.

He acknowledged that the team had done a wonderful job identifying the effects of the plan on the environment. He disagreed, however, with the siting of the parking lot near the clubhouse, as well as some of the sandplain values. He contended that the wetlands delineation was not complete, and the staff agreed with the Edgartown Conservation Commission (ECC) that the project would perhaps have some impact on the wetlands.

Mr. Donaroma asked Mr. Wessling if the ECC was still looking into the matter. Mr. Wessling said he had received a late letter from the ECC in which the group stated that nitrogen loading and the runoff were still a concern. Mr. Donaroma suggested that the ECC might be responding later that evening.

Mr. Wessling noted that the archeological assessment was "quite complete." However, he was concerned that the buffer zone in the Meshacket Cove area was not sufficient. He acknowledged that science behind the groundwater technology being proposed was "quite advanced," but he thought that some of Dr. Gaines' assumptions might not hold up to "real life" conditions. The staff were particularly skeptical about some of the leaching rates.

One of the things that struck Mr. Wessling as absent from the petition was the overlay of the Edgartown Great Pond District of Critical Planning Concern (DCPC) with the golf course. Some of it, in fact, would fall into Zone II of the protected area. He said that the use of pesticides and inorganic fertilizers were prohibited by the towns in such an area.

Mr. Wessling said that the staff had not yet seen the visual analysis of the architecture. He agreed that the circulation within and access to the site were successful, although it was thought that the driveway entering the site could be wider (18 feet wide, instead of 10).

Mr. Wessling said that at a "very late hour today" he had received a memorandum from the Edgartown Board of Health (EBOH), expressing qualms about the wastewater handling system. Prior to that, the staff had concurred with the existing plan.

The lack of an alternative to the proposal was of concern to Mr. Wessling. He said that he would like to see alternative layouts.

Mr. Wessling turned to the letters concerning the project that the MVC had received. Eric Turkington had written a letter in opposition. Edgartown Police Chief Paul Condlin and Fire Chief Bettencourt had written letters saying they didn't anticipate any problems in their areas of concern. The Housing Authority wrote that it had accepted the offer outlined by Messrs. Mone and Putnam. Mr. Wessling added that he had made up a scorecard of the comments that would be kept in the file containing the letters. Mr. Donaroma pointed out that the stack of letters was available to the Commissioners for viewing.

Mr. Wessling summed up by saying that the relationship between the MVC staff and the Applicant's team had been "very co-operative" and that he thought they could move forward in working with them.

Comments from Town Boards.

Mr. Donaroma asked for comments from Town Boards.

Ted Morgan, Edgartown Selectman, introduced himself at the podium. He noted that he was President of the Edgartown Golf Club, the operation of which he had been involved in

for the past 18 years. He explained that the club had 170 members, but 185 on the waiting list, with perhaps five new members accepted annually. "So some of these people are never going to make it," he said.

Mr. Morgan said that personally he considered the golf course a means of conserving land while using it in an organized way. All three golf courses currently on the Island, he said, are assets to the community. He discussed how it was the case. He added that in like manner the Lattucas were willing to sponsor tournaments and support charitable causes, as well as introduce an affordable Island membership program.

As far as the Edgartown Golf Club course was concerned, Mr. Morgan explained, the eighth green was just a few feet from Trapp's Pond, which continued to produce clams, quahogs, oysters and herring. Fairways were fertilized only once a year. Organics were used on the greens two or three times a year. He noted that the average home used more fertilizers than the golf course.

"The benefits of this proposal outweigh the detriments," he said. Mr. Morgan then outlined those benefits.

As Mr. Morgan was leaving the podium, Commission John Best asked him if he had spoken as a Selectman or as President of the Edgartown Golf Club, that is, as a private citizen. Mr. Morgan replied that he was speaking as a town official.

Thomas Durawa, Chairman of the Edgartown Board of Selectmen, approached the podium. He noted that compared with the "sketchy" proposal presented at an earlier hearing, the presenters that evening had made "a good start in clarifying a lot of what they're doing." He elaborated further.

Mr. Durawa said that he shared some of David Wessling's concerns. But on the positive side was the lack of housing, the charitable contributions and the efforts to look at the science. However, he wondered about the science and thought it should be analyzed and monitored independently. He was also concerned about the lack of a "disaster plan," a necessity should the project not be completed. He suggested a form of performance bond or a similar mechanism to ensure that Edgartown would not once again be left with "a scarred landscape."

Steve Ewing of the Edgartown Ponds Committee and Conservation Commission (ConCom) was the next to speak. He read a letter from the ConCom addressed to Commissioner Richard Toole, which requested a copy of the completed report on the surveys of the flora and fauna, as well as reports on chemical usage planned or anticipated to manage weeds, disease or pests.

The letter continued that the project overview map recently received by the ConCom did not include the 200- to 300-foot buffer zone delineations, which the ConCom had to add themselves. Greens, tees and roughs should be indicated on the plan, the letter said. The ConCom also wanted to review a draft conservation restriction so the its terms could be enforced.

ConCom restrictions and town zoning, the letter went on, currently prohibited activity within the 100-foot buffer near the wetlands. Also limited was the amount of lawn, to 2,500 square feet. Further, the regulations did not permit the application of inorganic fertilizers, pesticides, fungicides or quick-release chemicals within 300 feet of the wetlands.

The letter indicated that the ConCom was concerned about harm that would be done to the habitat due to changes in the landscape, as well as the large amount of turf that would require the regular use of chemicals and fertilizers. The ConCom looked forward to

addressing these concerns. The letter was signed by Lisa Morrison, the Assistant to the Conservation Commission.

From the Edgartown Ponds Committee came another letter, which Mr. Ewing read aloud. Some joking about Mr. Ewing's awards-show manner and his need for reading glasses interrupted. Also addressed to Mr. Toole, the letter thanked the Lattucas for meeting with them. So far the correspondence from the Applicants had been the certificate from the EOEA, technical reports dated October 28, 1988, and the Integrated Golf Course Management Plan and the Risk Assessment as presented by Dr. Stuart Cohen, the letter read.

The Committee requested a report on any anticipated changes to the flora and fauna. Moreover, the Project Overview had just been received that week, and the Committee had not been able to review any new information contained therein. In general, the Committee was concerned about the impact of nitrogen loading on the pond, the impact of the use of chemicals necessary to start and maintain the golf course, and the loss of the fragile habitat due to the existence of the course. The Committee also felt that the mission of the Great Pond Center needed to be more clearly defined. The letter ended by saying that the Committee looked forward to receiving the requested reports.

Next to speak was Paul Bagnall, Edgartown Shellfish Constable and Marine Biologist, who spoke for the Edgartown Shellfish Committee. Mr. Bagnall said he would be brief, being "most of us already know how it is already." The major concerns of the Committee were how the Great Pond Center would be set up and who would oversee the studies.

Mr. Bagnall noted that the pond was generally healthy but that it continued to show signs of stress. Therefore, all impacts had to be evaluated carefully.

Mr. Donaroma called for more testimony from Town Boards. There was none. So Mr. Donaroma called for comments from members of the public in favor of the Application.

Before that could happen, Commissioner Jane Greene asked Mr. Donaroma if she could ask Mr. Bagnall about what stresses he was speaking of. Mr. Bagnall returned to the podium. He said that when he spoke of stresses to the pond, he was referring, for example, to the fact that the oysters had a relatively high incidence of a disease known as "dermo," as well as relatively high incidences of clam disease. Also studies by the MVC and Dr. Arthur Gaines had found instances of elevated levels of nitrogen in the pond.

Mr. Donaroma then asked Mr. Bagnall for his opinion of the general condition of the pond. Mr. Bagnall answered that the pond was available for oyster harvest and would have to be opened by the Department of Marine Fisheries. The TMF finfish survey had found a healthy amount of herring, he said. So the pond showed signs of recovery from 1993. He discussed the pond's condition further, including the fact that there was a 20 percent mortality rate among the oysters.

Testimony from Members of the Public in Favor of the Application.

John McSweeney, golf aficionado, approached the podium and said that he had two letters to submit to the Commissioners. He thanked the Lattucas for the presentation and said that he was in favor of all the golf course proposals, that there was a "huge demand" for golf on the Island. Mr. McSweeney contended that some of the arguments he had heard against the proposal were unsubstantiated and that "the science is coming forward now."

Michael Joyce, the high school golf coach, said that the Lattucas had approached him early on to offer to let the high school team play at the course. He added that all the local courses were "more than generous to the kids on the Island." He said the Meeting House course would have a positive effect on the Island youth and that he supported the proposal.

Ray Ellis, Island artist, said he had been painting Island landscapes for more than 30 years and that nobody wanted more than he did to preserve the open spaces. He said he had been impressed with the aesthetic and technical aspects of the proposal. Some of the most beautiful vistas he had ever painted, he added, had been on golf courses. He hoped the project would be carried through.

Anthony Fisher, founding member of Meeting House Golf Club, spoke of his participation in organizing the club. The profit motive, he insisted, was not the main motivation for the project. The sole intention was to build a first-class golf course for current Island residents. The MacKenty property and the Lattucas were chosen as the best site and the best stewards, respectively. He spoke of the good works of the Meeting House Charitable Partnership program; the goals of the Great Pond Center, which would be an independent entity; the permanent restrictions on the area; and the extraction of nitrogen from the groundwater. He reiterated the club's dedication to keeping Edgartown Great Pond pristine and pointed out that the club would take up less than one-half of a percent of the Island's acreage.

Mike Cassidy, an Island resident for 19 years, said jokingly that he would speak to his "self-interests" and that with all he now knew about the proposal, he felt differently about it than he had at first. He said that he hoped to build a house on Wintucket Cove in a few years, so he was very interested in what happened in the area. He explained that he often walked on the MacKenty land and worried that if another project went on the property, he would never set foot on it again. Mr. Cassidy added that he shared some of Tom Durawa's concerns and hoped that they would be addressed.

Peter Simon, amateur golfer, "handicap, 20," said that over the years it had gotten harder to have a peaceful round of golf on the Island. He had some reservations about the project, but in general he was in favor of the proposal. He addressed the false perception that golf was a rich man's sport and proposed an off-season opportunity for the public to use the course.

David Leaning, resident of Kanomika Neck, stated that he and his seven immediate neighbors -- the Forresters, the Chamberlains, the Steins, the Johnsons, Cage [sic], Sargent and O'Keefe -- were taking the long-term view of the prospect and that only two of the households had any golfers and those belonged to Farm Neck. He expressed their concern about development on the Island, the use of the land and the health of Edgartown Great Pond. The group felt that the golf course was a far better alternative than a housing development, he said. He suggested that "rare" conservation funds go toward buying other properties.

Tim Clark said that the developers of the project that he had come to know seemed to be true to their word, that they were stricter than the Chilmark Conservation Commission (audience laughter).

Mr. Donaroma asked for members of the public in opposition to the proposal.

Testimony of Members of the Public in Opposition to the Proposal.

Jeff Agnoli came to the podium noted that there were "plenty" opposed to the proposal who would like to present their case as the House Managers in Congress had. There was grumbling from the Commission and the audience, and Mr. Donaroma and other Commissioners said, "Don't go there." Mr. Agnoli said that things would seem different after other things were said and that the technical aspects of the proposal had to be addressed independently.

Mr. Agnoli continued that all of the beneficial aspects of the proposal could be accomplished much better through another use of the land, that is, non-use of the land.

He questioned a key assertion by the Applicant's team that the project would actually benefit the land and pond; this, he said, was "counter-intuitive." The plume from the wastewater treatment plant, for instance, had never actually been located, he pointed out. He also wondered how all the things promised could be enforced. He finished with the observation that he hoped all these areas would be addressed seriously by the Commission and the Town Boards.

James Athearn, owner of Morning Glory Farm, said that based on his own experiences with pumping water from the ground, irrigating farmland and using pesticides, he was skeptical about the feasibility of pumping nitrogen out of the ground that was coming from the wastewater treatment plant. He also questioned the view from the water and the adequacy of the proposed buffer zone. Mostly, he said, he was concerned about the Great Pond and what he considered its "sacred" quality.

Rick Bausman, Edgartown resident, observed that he had been impressed with the presentation and that he did not question the sincerity of the presenters. He thought, though, that they were building in the wrong place. He spoke of the Great Pond as being a "precious natural resource" and his belief that more than theories and good intentions were needed. He conceded that the housing option was "frightening," but that there was also a conservation alternative. He wondered why a golf course had to be built in such a sensitive, "spiritual" area and discussed this issue further.

Mr. Donaroma asked twice if there was any other testimony in opposition. There being none, he asked for general comments.

General Comments from Members of the Public.

Peter L. Look, "40-plus-year resident of the Vineyard," said that as a tax-paying citizen and a person with deep roots on the Island, he was very concerned with the exorbitant cost of land. "If you call it extortion, let them call it extortion," he said. Vineyarders had to get all they could out of the project because it was inevitable that it was going to happen, he said. He worried about the health of the pond and the issue of bankruptcy, and appealed to the Commission to "do your job and do it right."

Mr. Donaroma asked for more general testimony; there was none. He then asked if anyone from the Town Boards had any questions before the Applicant summarized, adding that the Public Hearing would be continued. Mr. Toole asked if there was a date set for the continuation. There was a discussion of possible times. Finally, the date set was March 4, 1999. There was still more discussion, especially about the fact that to some it didn't make sense to begin another golf course hearing without this one's having been resolved. March 4, 1999, was again settled on. More (indecipherable) discussion ensued.

At last Mr. Donaroma pounded the gavel and announced that the hearing was indefinitely continued and that he didn't know what the date was yet. He said that the Commissioners had to discuss it and that the Town Boards would be notified. He then invited the Applicant to summarize.

Ms. Cardoza came forward and thanked the audience for listening, said the time was late and that that would be all for that evening.

Mr. Donaroma then said that the LUPC and staff would get a schedule together for the continued hearing. The hearing was closed at 10:18 p.m. At this time Commissioner Marcia Cini left the meeting.

Continued Public Hearing. Meeting House Golf Club, LLC.

The Martha's Vineyard Commission held a Continued Public Hearing on Thursday, March 4, 1999, at 7:30 p.m. in the Old Whaling Church (Methodist Church), lower level (Bailey Room), Main Street, Edgartown, Mass., on the following Development of Regional Impact:

Applicant: *Martha's Vineyard Golf Club and
Meeting House Golf, LLC
218 Speen Street
Natick, MA 01760*

Location: *Between Meeting House Way and Edgartown Great Pond, on
Edgartown Assessor's Map 27, Lots 13.1, 13.2 and 8.1, and Map 38,
Lot 8.*

Proposal: *To construct a private, members-only golf club with appurtenant uses,
such as a clubhouse containing a pro shop, cart storage, locker rooms, a
restaurant, bar, administrative offices, a maintenance building, staff
housing, pump houses and rain shelters.*

Mr. Donaroma announced the name of the Applicant and outlined the procedure to be followed that evening. It would begin with the Applicant's presenting an update on the proposal. Mr. Donaroma noted that because a large number of people had turned out for that evening's Hearing, it was important to keep the testimony brief and precise. Testimony from the public and Town Boards would be the focus of the Continued Hearing, with the Commissioners withholding questions and comment until after the former were finished. "On a lighter note," he added, "the Vineyard [hockey team] is ahead, 5-0." There was a burst of applause.

Applicant Update. Rosario Lattuca, Meeting House Golf, LLC.

Mr. Lattuca thanked the Staff and the Commissioners for the care and attention they had given the proposal. He said that Kelly Durfee Cardoza of Avalon Consultants, Inc., would provide an update of developments since the last Hearing.

Kelly Durfee Cardoza, Avalon Consulting, Inc.

Mr. Cardoza thanked the Staff, Commissioners and audience and said she was fully prepared to answer any questions that had arisen. Since the last meeting, the Applicant had been doing five things: 1) working with Commission Staff to resolve the individual issues and to provide them with written comments; 2) working with neighbors on the east side of the proposed course to move things away from them; 3) fully developing the groundwater monitoring plan; 4) forming the legal framework for the Great Ponds Center; and 5) developing the habitat enhancement program.

Ms. Cardoza reminded her listeners that the project would have no impacts to: the wetlands and shoreline conservation lands to the south; archaeological and historical resources; exemplary plant communities; threatened individuals of plants; drinking water; populations and schools; the area of the best moth habitat; the best wildlife habitat along Kanomika Neck; and the Edgartown Great Pond.

Ms. Cardoza then outlined some of the benefits of the proposal: no housing development; public access to the property, along with an observation deck; conservation restrictions along Kanomika Neck and development restrictions for the rest of the property in perpetuity; preservation of the shoreline; an improved view of the Great Pond with the relocation of the Bigelow House; nitrogen removal from the groundwater; an affordable

housing initiative; the Great Ponds Center; the Community Partnership program; new tax revenues; and an affordable Island membership program.

Ms. Cardoza explained a plan showing the old routing, where the walking trail, the clubhouse and the parking lot came close to the six houses on the east side of the property. "From the point of view of golf," she said, "the old plan was the better plan"; but the Applicant was willing to satisfy those neighbors. The changes to the plan included: moving the clubhouse two and a half football fields away from the neighbors; removing the entrance roadway from Kanomika Neck; moving the maintenance facility and limiting the parking near it; moving the walking trail to the central portion of the property; and agreeing to fix any problems that might arise in the neighbors' wells, although Ms. Cardoza was certain that there would be no problems. She went into some detail on each of these elements.

When the Applicant had met with Commission Staff about the new routing that week, they had gone over the impact analysis, Ms. Cardoza explained. One good change would be a lessening of the fragmentation of the sandplain with the moving of the clubhouse. She added that she did not yet have full feedback from the neighbors to the east.

Ms. Cardoza spoke about the Great Ponds Center, an independent research center that would benefit Edgartown, as well as the rest of the Island. It would serve two functions: the scientific study of the Great Ponds; and the monitoring of the golf course operations. She explained that a nine-member board was planned, with five members from Island organizations, including, she hoped, the MVC, the Conservation Commission, the Ponds Advisory Committee, the Shellfish Committee and the Conservation Partnership. Also on the board would be Dr. Arthur Gaines as the initial director, along with three other environmental scientists.

Ms. Cardoza emphasized that the monitoring would be paid for by the golf club but would be conducted independently by the Great Ponds Center. All results would be made available to public agencies. Meeting House Golf would initially fund the Great Ponds Center with \$450,000, while envisioning over the long term funding from grants. In addition, the club would continue to contribute \$125,000 annually, adjusted for inflation. The center would be located in the Beriah Weeks (MacKenty) House.

Ms. Cardoza then spoke about the proposed groundwater monitoring plan. Dr. Stuart Cohen of Environmental & Turf Services Inc. had proposed a comprehensive monitoring plan that included the installation of monitoring wells and regular testing. Ms. Cardoza explained the two-fold purpose of the monitoring: to provide early warning of any impacts and, if any detections occur, clear provisions for a response; and appropriate mitigation, establishing clearly defined thresholds, currently set at one-half the recommended safety level. A written document containing a contractual commitment to the Great Ponds Center had been submitted to the Commission Staff that week, she added. It provided, among other things, that the golf club would be shut down by appropriate agencies if any problems arose.

Ms. Cardoza then introduced Vern Laux, who would speak about breeding bird habitat enhancement.

Vern Laux, Avian Expert.

Mr. Laux began with a few words about his background, which included 22 years of studying birds on the Vineyard and doing all the breeding bird studies for the Fish and Wildlife Service during that time. He said he had received a call from the Lattucas about a year ago, at which point he was neither for or against golf in general. He had spent three hours walking the property and had, in fact, lived in that area for about six months at one point. He said that he had found the Lattucas very amenable to his input.

Mr. Laux continued that he was talking about a 200-acre piece of land. One of the benefits of the Meeting House proposal would be the preservation of one mile of shore line along the Great Pond; all of Kanomika Neck; about 47 acres of unchanged landscape; and only about 150 acres of upland area changed. This last area was not good for bird breeding, in any case. He explained how the Great Ponds Center would enhance the sandplain, which was now three acres but would be expanded to 20 acres under the plan. This would provide an excellent habitat for many bird, butterfly and plant species, he added.

Mr. Laux went on to say that he was proposing to put up a "tremendous" number of birdhouses, about 400. He showed his listeners an example of the tree swallow/bluebird house. He went into some detail about his plans for different types of birdhouses on different areas of the property. He also planned a bat building, a series of latticework crevices with a low roof, no one had previously built one this far north.

Mr. Laux explained that he hoped to make Meeting House "the most bird-friendly golf course in North America." This would be a "great opportunity" to increase the habitat for birds in this area, he said. Also, the club would sponsor natural history bird walks, with some on the property and some off. He finished by joking that you would not be able to play golf, there would be so many birds at Meeting House.

Mr. Donaroma asked if Mr. Laux expected any species to be lost as a result of the development. Mr. Laux responded that in fact the site was "not undisturbed, as I keep reading." He said that a couple of pairs of oven birds might be lost, maybe some Eastern wood pewees.

Ms. Cardoza returned to the podium. The time was 8:00 p.m. She said that that was basically what had been worked on for the past few weeks. The Applicant had responded to the Staff Report and Staff questions, the Staff had produced a new Report, the monitoring plan had been provided, changes had been made to satisfy the neighbors, and the legal framework for the Great Ponds Center was in place. Ms. Cardoza stated that the Applicant felt ready to hear from the Commission at that point.

Mr. Donaroma asked Ms. Cardoza if Mr. Laux's plans for the breeding bird population were in writing. She replied that the Commission would have it shortly.

Mr. Donaroma if the Staff had anything to report on; the answer was no.

Mr. Donaroma asked for Testimony from Town Boards.

Testimony from Town Boards.

Steve Ewing, Chair of the Edgartown Ponds Advisory Committee, read a letter from his committee dated that day. The committee had the following concerns regarding the impacts of the golf course on the pond and its environment: would the water used for the golf course reduce the recharge to the pond and result in adverse impacts to the pond; what would trigger changes in the use of golf course chemical treatment, should chemicals be detected in the groundwater; and a concern about chemical use in Zone 2 of the ponds district.

The committee had the following recommendations for the Commission and the Applicant to consider: further reduction of dependence on chemical treatment of the turf; revision of the grass species so as to require less maintenance; and an option for organic treatment in Zones 2 and 3 so as to comply with the Conservation Commission's regulations.

Furthermore, although the Great Ponds Center would be a substantial benefit, the committee believed that further direction regarding the authority, chain of command and accountability should be presented by the Applicant. If the Application were approved,

the Committee would recommend that the center's first task be a nitrogen loading study based on a detailed assessment of primary productivity within the pond, including carbon cycling, oxygen/carbon dioxide production, and so forth.

The committee also wanted to stress the prohibition of hazardous or toxic materials within Zones 1, 2 and 3 of the ponds district. Lastly, the committee recommended that proposed development within the sandplain grasslands, especially those areas identified as having high diversity or having state-listed species, be avoided.

Mr. Ewing asked the Commissioners if they had any questions; they didn't.

Paul Bagnall of the Edgartown Shellfish Department started with a brief history of the pond openings and management since the 1930's. He spoke in detail about salinity levels, the sluiceway that had been installed, and work with the Department of Marine Fisheries, and he characterized Edgartown Great Pond as "a healthy pond that is showing signs of stress." The oyster populations had experienced die-offs in 1985 and 1993. The latter time it was due to a "unicellular algal bloom" that had smothered the oysters. The pond was currently opened two to four times each year, depending upon conditions, with openings lasting from seven to ten days.

Mr. Bagnall was concerned that sources of additional nutrients would compound current problems. Another sign of stress was that Edgartown Great Pond oysters had an extremely high incidence of a disease called "dermo," first detected in 1994. Although dermo was present in all saltponds, only in Edgartown Great Pond had it taken hold and caused oyster mortalities.

Mr. Bagnall wondered how accountable the golf course would be. It was his opinion that in the long run the project would add nitrogen to the pond, which would then lead to algae blooms. The committee was also concerned about a lack of flushing in the pond and was organizing a dredging project as well as the development of an inlet structure so that pond openings would be more efficient.

The Shellfish Committee was insisting that the Conservation Commissions prohibition of the use of harmful chemicals in Zones 1, 2 and 3 of the ponds district be upheld. Mr. Bagnall said he would welcome questions from the Commissioners then or in the future.

Mr. Donaroma asked if the Commission had a copy of that report. Mr. Bagnall said he would supply one.

Randi Vega, Chair of the Dukes County Regional Housing Authority, began by saying the authority had been asked by the Commission to look at the impact the golf course would have on the Island's housing situation. She had worked with Bob Mone and Herb Putnam, who were very aware of the impact and very willing to work with the authority.

Ms. Vega said that the authority had found MVC policy in this area inadequate for a project of this scope. The value of this project was in the land itself, not in the buildings, and so the conditions as stated in the policy would not apply well to this proposal. There would be many jobs created for this project, perhaps 50 in the summer, she explained. Where would these workers live? she wondered.

Ms. Vega finished by saying that she had a letter addressing these issues, a copy of which she handed to Charles W. Clifford, MVC Executive Director.

Mr. Donaroma asked for more testimony from Town Boards; there was none.

Mr. Donaroma asked for testimony from the public.

Testimony from the Public.

John McSweeney of Edgartown, a self-described golfer, approached the podium. Mr. Donaroma joked that he thought he had seen him up here the other week. Mr. McSweeney said that he had but that he had a different topic this time -- the tactics of the opposition. He said he had heard a lot of complaints about the scientists being paid by the developers; he, for one, would question anyone who *wasn't* getting paid. He inveighed against the committee opposing the project [Citizens for the Protection of Island Resources], who, he said, were using "weird science and a lot of scare tactics."

In addition, he continued, the conservation groups against the Vineyard Acres II golf course had developed a "us or them" strategy. At this point Commissioner Lenny Jason, Jr., asked Mr. McSweeney to speak to the project or sit down.

Mr. McSweeney pointed out that the two golf course proposals were an eighth of a mile apart and that the underlying science should apply equally to both. He had heard that there would be a "filibuster," so he encouraged the Commission to move the proposal along "in a timely manner." "Thank you, John," said Mr. Donaroma. "Democracy is a wonderful thing." (laughter)

Mr. Donaroma said that he would take the next gentleman waiting but after that would take only speakers in opposition to the proposal.

Speaking for himself and his family, **Chris Chandler** said he was an **Edgartown resident** who had recently purchased property from Jerry and Maria MacKenty. So he would be an abutter to the golf course if the project were approved. He had walked the property for a long time and thought he would be "a tough sell." The fact that the Applicants would contractually agree "to shut this thing down if in fact it is proven to be negative to the pond ... I think it's a great idea." He finished by saying that he thought the Applicant would do a good job and that they were not offering "empty promises."

Mr. Donaroma asked for members of the public who wanted to speak in opposition to the proposal. **Brendan O'Neill, Executive Director of the Vineyard Conservation Society**, said that for more than a year Island conservation groups, including his own and the Sheriff's Meadow Foundation, had expressed to local permitting boards, state agency reviewers and the Applicant their great concern that the proposed golf course land use was an inappropriate match for the great pond site and should not be pursued.

Mr. O'Neill said that the VCS had forwarded to the MVC various information it had gathered on golf course impacts. In addition, he had asked a number of experts to review the Applicant's submission, and those reports would be part of the public record as well. Those findings "reinforce our conviction that this pond is one of the Island's most important and sensitive aquatic resources, that this development poses a risk to the pond which is unacceptable and that this Applicant's submission doesn't provide us with any comfort level concerning that threat ..."

Then, with Chairman Donaroma's permission, Mr. O'Neill invited to the podium **Mark E. Nelson, a principal and hydrogeologist with Horsley & Whitten, Inc.** Mr. Nelson explained that he had 15 years' experience in the field of hydrogeology and land use impacts on both groundwater and water quality. He had been involved, for instance, in the review of the Nantucket Golf Club. The basis for his review was the sensitive nature of the great pond and the need to look at it as "an outstanding resource water." It was, he explained, the most pristine type of body of water that could be looked at under the commonwealth's regulations.

Mr. Nelson said that the Applicant was making "a startling proposal" that there would be *no* negative impacts. So they had really "raised the bar" for the review of the project; if the Commission felt there are *any* negative impacts, then it must reject the project.

In his review Mr. Nelson had concentrated on nitrogen, pesticides and other issues, like the use of the irrigation well on the property. In looking at the nitrogen-carrying capacity of the pond, one must look to the studies done four years ago by Bill Wilcox and Arthur Gaines, with some reservations, he said. Mr. Nelson showed a graph that plotted the nitrogen-carrying capacity of the pond, the nitrogen output of the golf course and the output of a residential development, along with four scenarios, two with golf courses and two with residential developments.

The Applicant's study presented in January had worked with a 6 percent leaching rate of fertilizers; Mr. Nelson thought that a 10 percent rate was more reasonable. You had to plan, he explained, for a number lower than the limit. The two golf course proposals he was looking at met or exceeded the nitrogen-loading limit of the pond, while the residential nitrogen loading was, in fact, less than in the golf course scenarios.

Finally, the Applicant's offer to pump water from the area of the wastewater treatment plant plume might sound reasonable, Mr. Nelson said. But the nitrogen-capturing effects would be short-lived, he believed. Also, he noted that in the appendices the Applicant's experts had written that the desired nitrogen-loading level would be maintained by adding clean water to the irrigation water.

Turning to the impacts of pesticides, Mr. Nelson contended that the mobility of the pesticides was likely to be greater than reported because 1) the organic matter content had been overstated since the content had been measured from the very top inches of soil instead of from a more conservative full 2 feet down; therefore, the nitrogen-leaching rate had been understated; 2) the Applicant's model for the movement of the pesticides below the soil layer and above the water table was based on an organic matter content from the first inch of the soil instead of from the next 5 feet down, thereby taking topsoil numbers and applying them to glacial sediments; 3) for the area right near the pond the Applicant used a model of 7 feet of dry soil and sand when, in fact, it was probably more like 4 feet at the time; and 4) the models looked at the pesticide levels in the water after it has been diluted by the aquifer, instead of before.

The last area of concern was the models for the drawdown of the water table. For instance, the drawdown of the water table underneath the wetlands had not been addressed, the irrigation would be taking place during the driest months of the year, and the zone of contribution and the capture area for the irrigation well had not been submitted as part of the appendices. Finally, the Applicant was requesting a waiver from the Conservation Commission for the use of pesticides in Zones 1, 2 and 3 of the ponds district, and this was of great concern to Mr. Nelson.

Next to speak, also on pesticide use, was Adel Shirmohammadi, Ph.D., professor in the **Biological Resources Engineering Department of the University of Maryland at College Park**. Dr. Shirmohammadi began by giving some details about his background. He said that the general criteria for project acceptance should be engineering feasibility; economic feasibility; environmental feasibility; public feasibility and political feasibility.

Dr. Shirmohammadi showed a graph that analyzed the soil analysis data provided in the scientific appendices of the Applicant. Samples had been taken from only five spots, and there was only one sample taken to show organic content. If that had been taken from a wooded area, for instance, and only from the top few inches, the organic content would be high, higher than it would be for many of the other areas on the site. So the 9 percent organic content described was not accurate. He went into great detail about different absorption scenarios.

Another distortion in the appendices arose from the fact that the scientists had gotten their values when the water table was at its highest and therefore at its greatest capacity to

dilute the nutrients in the soil. Dr. Shirmohammadi continued for some time pointing out further errors in modeling.

Finally, the professor recommended that: the soils be thoroughly analyzed; that a statistically valid sampling size be used; that the organic matter content measurement be taken from more than 2 feet; that the 12 chemicals proposed for use at the site be subjected to the PRZM model; and that a new dilution rate for the site be determined.

The professor thanked his listeners and submitted a copy of his report as well as a copy of his curriculum vitae to the Commissioners.

Next to speak was **Richard D. Klein, president of Community & Environmental Defense Services of Freeland, Maryland**, who began by promising he would be brief. "The other two said that," quipped Mr. Donaroma, to much laughter. He described in detail the "very deep concerns" he had about whether the golf course would have a favorable or adverse effect on the aquatic environment and the possibility of alternative uses that could preserve both. He provided some of his background, which included 30 years' experience evaluating the effect of human activities upon the aquatic environment, 18 of them with the Maryland Department of Natural Resources, the last 12 as the head of his company. In 1989 he did a study of 11 golf courses in Pennsylvania and their effect on the aquatic environment. He also wrote Chapter 15 of the EPA's handbook on the subject.

The time was 9:00 p.m. "The question is," repeated Mr. Klein, "is it possible to build an environmentally benign golf course? The answer to that is overwhelmingly 'yes'." However, in the case of the Meeting House proposal, he said, there was not yet enough data to determine whether or not it would be environmentally benign; and the data that were available seemed to indicate that it could cause adverse effects. He pointed to a graph that compared the nitrogen loading from the proposed golf course with leaching rates of 6 percent, 10 percent and 25 percent (at 536.95 kg/yr, just a little more than the safe load of 520 kg/year; 717.85 kg/year; and 1,396.23 kg/year, respectively) compared to that from a 40-house residential development (192.80 kg/year), that of the existing land use (200 kg/year), and that from a conservation use (22.00 kg/year).

Mr. Klein reminded his listeners that a 10 percent leaching rate was far more likely than the 6 percent rate that the Applicant's consultant was using for his model. The Cape Cod Commission, for instance, assumed a rate of 25 percent for golf courses, to provide "a good margin of error." He emphasized the "tremendous amount of uncertainty in this science"; that is why the highest possible rate should be used in the models.

Mr. Donaroma asked how many hypothetical pounds of fertilizer were being applied to arrive at the nitrogen loading figures on the graph for the golf course. Mr. Klein said he had got the figures from the Applicant's reports, from about 4,500 to 6,600 kg/year, which he had averaged to 5,600, plus he included additional nitrogen from the wastewater treatment plant.

Commissioner John Best asked if the residential figures included just residential wastewater systems and fertilizers. Mr. Klein replied in the affirmative, adding that he had also figured in the discharge from 160 acres of grasslands releasing about an average of 0.10 kg/year. Where did he get the figures for the existing use? wondered Mr. Best. Mr. Klein said he had gotten the amount of nitrogen applied to Jim Athearn's fields from Mr. Athearn himself. So the conservation figure reflected no farming, no residential use? asked Mr. Best. That's the assumption, answered Mr. Klein.

Mr. Klein then discussed pesticide use. He concluded with a graph that illustrated that a residential development would have far less of an adverse effect as far as the use of pesticides was concerned. He submitted a copy of his report for the Vineyard Conservation Society to the Commissioners and thanked his audience for their attention.

Commissioner Ben Hall, Jr., asked Mr. Klein if the salinity level used for the graph was that of the ocean or of the pond itself. Mr. Klein replied that he had used a figure of 25 parts per 1,000, a figure for the pond from Arthur Gaines; the ocean was 35 parts for 1,000. The concentration could be higher at the time of a breach. Commissioner Jane Greene asked at what part of the pond the samples were taken. Mr. Klein answered that the sampling was done throughout the pond, including Meshacket Cove, when the pond was open. Ms. Greene said that she would like to see those statistics; Mr. Klein said that the reports had been submitted.

The time was 9:15 p.m. **Brendan O'Neill** returned to the podium and provided a quick summary of the scientific data and the Conservation Society's position. "This Applicant has not submitted the information needed to show that the Meeting House golf course won't hurt the pond," he said. "The Applicant is silent on the effects for the pond's diverse wetland habitats by pumping irrigation water," Mr. O'Neill said. "The Applicant is silent on the zone of contribution for those irrigation wells, [and] their statements of zero impact on the pond are not substantiated. Quite the contrary ..." He finished by asking the Commissioners not to allow the Edgartown Great Pond to become "an experiment" and spoke of the efforts of Island conservation groups to protect this resource. He added that he would be submitting his comments in writing.

Paul Goldstein, a entymologist and evolutionary biologist from the University of Connecticut, approached the podium. Mr. Donaroma asked, "Are you from this group?" "No," Mr. Goldstein replied, "I only sit with them. In spite of that, I'm a fairly nice guy." (laughter) He said that many there knew him from his work on the Island over the past 13 years. He added that those who wondered about his credentials could consult a copy of his curriculum vitae. "I think the only credential that you really need to think about," said Mr. Goldstein, "is one that Vern Laux raised, that is, time on the Island and experience with the Island." He said that he had been as active a research field biologist on the Island as anyone else out there and that he was not being paid by anyone.

Mr. Goldstein explained that his purpose was to articulate the kind of information the Commissioners would need to make a sound decision, and from this viewpoint he would argue that the proposal for the golf course did not provide them with enough information to make that decision. Some of the "glaring shortcomings in the so-called wildlife inventory" presented, for instance, were suggestive of "an approach that leaves something to be desired." Mr. Goldstein proposed to speak about "what was done; what was not done; what it means; and what it does not mean."

According to publications of the Massachusetts Natural Heritage Program, Mr. Goldstein continued, Edgartown was among the top five towns in the commonwealth with respect to its concentration of endangered plant and animal species. He himself had located over 20 state-listed insect species in the town, the most for the state, except for West Tisbury. The reason the Applicant's scientists had not found these species, he said, was because they had not looked for them. For instance, Vern Laux looked for state-listed butterflies; yet there were none on the Vineyard, so there is no mandate to protect any of those species and it was basically a diversion.

However, Mr. Goldstein continued, there *were* state-listed moths. The Applicant had hired Mark Mello, "a credible biologist from South Dartmouth," to conduct an inventory; unfortunately, that inventory was never done. In other words, the Applicant was asking the Commissioners to approve the proposal now and to do the inventory later. But once the project was approved, the purpose of the inventory was obviated.

Moreover, Mr. Mello did not visit the site until last September and October, at the tail end of the flight season. On the one hand, Mr. Mello had handed the Commissioners a "worst-case scenario" that actually included 16 state-listed moths; but he based his conclusions of there being no impact on them from work he had done off-Island at Camp Edwards ("a

place with a *very* different land use history") and "an eyeball estimate," both of which had resulted in an oversimplification. It was a good example of a methodology that the scientific community called "logical positivism," taking a limited series of observations and drawing great, general conclusions from them. As a result, Mr. Mello had "lowballed" the number of moth species in the area and the number of acres needed to support them.

Mr. Goldstein strongly urged the Commission to table the proposal until a valid inventory had been done as a necessary prerequisite for further consideration. He thanked his listeners and invited questions. Mr. Donaroma asked him if his report would be submitted in writing; Mr. Goldstein answered yes.

Commissioner Lenny Jason, Jr., asked him at what point in the flight patterns should the species be inventoried. Mr. Goldstein replied that the state-listed species' pattern went from April until October and that eight to 12 visits, wisely chosen, would be recommended.

Next to speak was **George Clark of Edgartown**, representing himself and his family as owners of property in Meshacket Wood and Meshacket Cove that abutted the site of the proposed golf course. He had built a house seven years ago that looked directly across to the 18th tee, so he had a personal interest in the development, he said.

Mr. Clark explained that he had spoken to the Commission last fall and all this time had had a plan in mind that had been described by the Lattucas that summer. It had shown a "modest" clubhouse at or near the site of the MacKenty house, no observation platform, and no maintenance facility. "[B]owing to the inevitable," Mr. Clark thought that the golf course was the better of the alternatives; naturally, he would prefer the whole area to be conserved.

In January, however, the plan had been completely changed, he said. There was now a clubhouse a half-acre in area located at the southeast corner of the property, close to his own property, "presenting the prospect of noise, lights, car doors slamming, delivery trucks arriving, and so on, a substantial environmental deterioration of that particular area ..."

Moreover, a "major" maintenance shed was now planned nearby, as well as a "redundant" public observation platform. Now, he continued, the clubhouse had been moved west. This was unacceptable to Mr. Clark, who thought that the clubhouse should be in the location originally planned. In the latest plan there was an artificial pond in the northwest corner. Why not put it there? he asked. Also, he was concerned about the "significant" amount of noise produced by starting up the various machines at the maintenance facility.

Mr. Clark asked the Commission to consider the private home owners to the east of the site and not approve the proposal. He submitted a letter to the Commission that had been sent earlier.

Tara Hickman of Edgartown described herself as a mother and a 10-year Island resident. She spoke of the walks she took with her daughter and how when she visited with her the place where she grew up in Pennsylvania, she would have to describe vistas that no longer existed and explain to her daughter how "nobody cared enough to save them." She was concerned as well because she lived on an island: "Once the water's gone, it's over," she said.

As a businesswoman, Ms. Hickman was worried about the designation "LLC", limited liability corporation. She felt that businesses should stand on integrity, honesty and worth. On the issue of worth, she wondered, "What if you're a fish and that's your home?" She also believed that the project should stand on its own and that people should not be "bribed," referring to some proponents who had visited the Martha's Vineyard Arena and pressured people to sign letters of support.

Ms. Hickman finished by asking whom the golf course would serve. "Not me," she said. The Commissioners needed to think about Martha's Vineyard and "why do we all live here."

Liz Bradley of Edgartown, a 39-year-old who had lived on the Island for 15 years, described Vineyard land as so precious that a postage-stamp-sized piece could "break the bank." She said that the area of the proposal had often been the place of "many of my most joyous, peaceful hours, both personally and professionally..." However worthy the causes that the project would support, however many the scientific checks on possible damage to the ecosystem, the Islanders could never be fairly compensated for the "irrevocable changes to our precious landscape," she said. A beautiful golf course could be built "anywhere there is open land," she contended, "but exquisite natural landscapes such as we are discussing tonight cannot be created for all our science and money. Trade a natural piece of heaven on earth for a manicured, hyperfertile, artificial landscape? No, thank you." There was a burst of applause.

Jerry Lavoie of Edgartown introduced himself and said that he lived at 24 Meshacket Wood Road. He read excerpts from a letter in which he stated that he "vehemently" opposed the proposal. He said in part that "there's only one Edgartown Great Pond in the world." He contended that the project *had* to affect the pond, and he wondered whether it could be fixed if anything unfortunate occurred.

Mr. Lavoie expressed concern about Plan 12, where the clubhouse, maintenance facility and walking trail had been very close to his property, although he conceded that the new plan was better in that respect. He was worried as well by the inconsistencies between what the Edgartown Zoning Board of Appeals had written and the claims of "no adverse conditions" and the repositioning of the buildings by the Applicant. Originally, the facilities were to be placed in the middle of the property; that is what he preferred.

Jay Guest, an Edgartown builder, said that he had been a outspoken critic of the Edgartown wastewater treatment facility and its effect on the pond. He had been one of the petitioners against the wastewater treatment facility's permit to dump thousands of pounds of nitrogen into the pond annually. The parameters and contents of the plume, he said, were still unknown. There was also the possibility of another plume, this one coming from the landfill.

Mr. Guest referred to the most comprehensive study to date of the Island's ponds, which was done in 1995 and 1996 and had been made possible by a grant from the Edey Foundation, along with collaboration from the Martha's Vineyard Shellfish Group, the Martha's Vineyard Commission, the UMass Extension, the EPA, and volunteers from the Island and the Wampanoag tribe. All the ponds were found to be in "pretty good shape, all, that is, except the Edgartown Great Pond."

The study found, he continued, that the 890-acre Edgartown Great Pond, with a watershed of just 5,100 acres, had a much higher concentration of nitrogen when compared to the Tisbury Great Pond, with a watershed of 11,000 acres. The inability of the Edgartown Great Pond to maintain an opening on South Beach, along with the well-documented plume from the wastewater treatment plant and quite possibly one from the landfill, had caused the comparative deterioration. Mr. Guest said he had found that Edgartown officials did not want to discuss these issues. He spoke of the loss of biodiversity in the pond, the suffering of the oysters from dermo, the "gobs of algae" and the stench from its rotting. "Ladies and gentlemen of the Commission," he intoned, "this is a pond in trouble."

Mr. Guest recounted how he had contacted the EPA, which had informed him that it was a state matter. The Department of Environmental Protection's position and record on the Island is clear, he said. They are liable for allowing the treatment facility to empty into a

coastal embayment, "a blatant violation of Mass. Regulation 314 CMR 6.07, which strictly prohibits this."

The time was 9:50 p.m. Mr. Donaroma interrupted the speaker and asked him to keep to the Application at hand. Mr. Guest agreed to. He went on to say that the only thing left to protect the pond was the Martha's Vineyard Commission and the populace of Martha's Vineyard. The science proposed by the Applicant was "simply preposterous." It was not a question of *if* the chemicals would enter the pond, but of when, he contended.

He challenged the Town of Edgartown, which had come up with \$13 million for a treatment plant that benefited only 8 percent of the residents, to form a triumvirate with the Land Bank and Island conservation groups to purchase the property, making it a keystone for an effort Island-wide to protect *all* ponds from nutrient loading and from development of any kind. He spoke also of the Herring Creek case and the stand taken by the Town.

Next to speak was **Andrew Woodruff of West Tisbury**, owner and operator of Whippoorwill Farm, who said for the record that he had used pesticides in the past, but had converted to organic farming, which was "working very well" for him. He had some difference, he said, with the contentions of the Applicant's scientists that the level of organic matter in the soil was 10 percent. In his 20 years' experience he had found it to be, at best, 3.5 to 5.0 percent, except in areas where he had dumped "enormous quantities of manure," where it might then reach 9 percent. He hoped that the Commission would look at these issues seriously and not rush, and he urged them to reject the proposal.

Sally Apy of Edgartown related how 10 years before she had been fortunate enough to receive a resident homesite in the area of the proposal. "It's really scary," she said, referring to the golf course proposal. Are we supposed to say, she wondered, "Sure, plow it all down, take away those trees, rearrange it, put a pile here, do this, do that, put some plastic under it, suck it away, it sounds great!?" Lights and noise were one thing to consider, she said; chemicals were "a whole other game." She finished by adding that she didn't envy the Commission, and she thanked them for all they were doing.

Next at the podium was **Jeff Verner of Edgartown**, who said that he lived at 22 Meshacket Wood Road and was not opposed to the building of golf courses *per se*, that his concerns were as a direct abutter. When he first heard of the plan, he said, he had reconciled himself to the inevitability of the project. At the October 21, 1998 meeting of the Zoning Board of Appeals, the maintenance facility was well off Meeting House Way and the clubhouse site was to be at Jerry MacKenty's existing house. (Mr. Verner referred to this as "Plan A.")

Then in "Plan B," presented to the Commission at the Public Hearing on January 28, 1999, all the facilities had been placed on 20 acres near his neighborhood. He had felt "blindsided" by the changes and wondered if the Lattucas were employing a "bait and switch" tactic. Tonight's "Plan C" was again different, he added. He understood that not everyone could be pleased.

He described how rare a body of water like the Edgartown Great Pond was. We had to be certain, he said, that "20, 50, 100 years down the road, decisions made in 1999 had not impaired the pond's ability to produce food, recreation and enjoyment for future generations." He added that he did not envy the Commission: "May you endeavor to work wisely on this issue before you tonight," he said.

Mr. Donaroma took note of the late hour and asked if there was anyone who wanted to offer testimony who would not be able to return at the next meeting; there were none, so he motioned for William E. Marks to come forward.

William E. Marks of Edgartown observed that over the years he had "done a lot of things with water." He had owned a state-certified water-testing laboratory for 14 years; had been the water quality manager for the MVC; had written a book about water; and that most of his life had been involved with water.

He described a 7,000-mile horseback ride he had taken from San Diego to Maine, where he had attended a similar meeting. The timber company had proposed to cut down 200 acres, and the experts and Ph.D.s had insisted that there would be no impact on wildlife and the groundwater. An old farmer had gotten up and challenged one scientist's contention that no harm would come from the cutting. "Son," the old man said, "you've been educated far beyond your intelligence." (laughter)

Mr. Marks contended that the Applicant's conclusion that the development would have no impact on wildlife, groundwater and the pond was "impossible." He pointed out the fact that the area had a shallow water table, and he spoke of the possibility of "synergisms," chemical changes that could not be predicted among the 37 pesticides that would be used. Mr. Marks spoke of the mercury pollution at Minimata [sic] in Japan, which had been overlooked as a cause of illness and birth defects for many years.

He then described how denuding the land of tree cover would cause the ground to freeze more easily in the winter and to dry out more quickly in the summer, thereby affecting the "in-soak" factor of the ground. Mr. Marks then quoted the philosopher William James: "What is known to science is a drop; what is unknown to science is an ocean." There was some applause.

In view of the late hour, Mr. Donaroma announced that he would open up the public comment to general comment or favorable testimony, as well as unfavorable testimony.

The next person to speak was **Kathy Cerick of Chilmark**, who described herself as a member of the Chilmark Conservation Commission and a mother. She said that she did not want the Island to change. She wondered how the Meeting House project would affect the health of Islanders. A Center for Personal Integrity publication that she read from indicated that golf courses regularly apply up to seven times the amount of pesticides per acre as farming did. In addition, six of the 49 pesticides sprayed on fairways were hazardous to one's general health, and greenskeepers had been found to suffer from high rates of brain cancer and non-Hodgkin's lymphoma, two cancers commonly associated with long-term pesticide exposure.

Ms. Cerick continued that one of the proposed pesticides was 2-4-D, one of the active ingredients in Agent Orange. She warned of the synergistic effects of the pesticides, as Mr. Marks had. She wondered, given the designation LLC, what the Applicant wanted to limit their liability to. She ended by reading the last two sentences of a letter submitted by her 10-year-old daughter, Liane Fitzgerald.

Franz Guest of Vineyard Haven introduced himself as "a shameless tree-hugger" and not a paid expert. With all the testimony he had heard, he said he was starting to worry about [the health of] golfers (laughter). Mr. Guest related how as a boy he had worked as a caddie at an exclusive golf course. He spoke of the polluted state of the creek there and how "getting creeked" was the ultimate punishment for a violation of the local code of behavior. He said he was concerned about the abutters, and as "a common man with common sense," he knew that the "Dr. Kevorkian/Frankenstein approach" of chopping everything down and re-creating it would have to have a negative impact.

Next to speak was **Janet Sigler of Meshacket Wood in Edgartown**, who spoke for herself and her husband, Jay. She related how surprised she was to see how close the facilities had been to her neighborhood [Plan 12], instead of in middle of the site, as originally planned. She acknowledged that the Lattucas had listened to their concerns, yet she was still left with "very uncomfortable feelings" with the idea of the possible pollution

of the water supply, drawdown of their wells during periods of draught, noise, and loss of privacy. She wondered if perhaps 200 acres was too small for such an ambitious project, because Mr. Lattuca had said he had little "wiggle room" in the plan.

Philippe Jordie of Aquinnah related how he and his family wished to live on the Island because of the quality of life, without the faceless quality of suburbia or the soul-less nature of exclusive resorts. The membership fees, he pointed out, would support of a family of three, demonstrating to him that the long-term benefit of the project was for a wealthy minority of the Island's seasonal population. He said that the community had to draw "the proverbial line in the sand," and he hoped that the property would be purchased by conservation interests.

Jenifer Strachen of West Tisbury explained how her family had owned a Wintucket Cove home for generations. She had a degree in natural resource studies, she said, and she expressed concern about the location of the golf course and the lack of accountability of the Applicant. "It is obvious that building golf courses is the job that the Lattucas do," she continued. "They pick the potential location, surround themselves with hired experts, engage a consulting firm, [indecipherable] investors, and they even seek out and hire local community leaders to support them. Then they concentrate on building golf courses."

Ms. Strachen derided the artificial environment that the Applicant would create, which would threaten the water supply and require "tons" of fertilizers. "The Lattucas will say whatever they have to and their hired experts will manipulate the models whatever way is needed to get the golf course built," she added. She urged the Commissioners to help Islanders to preserve what was left of their natural environment. A burst of applause erupted as she returned to her seat.

Next at the podium was **Jeff Agnoli of Edgartown**, who said that Islanders were "fortunate" to have the forum to discuss the proposal. He noted that because of the "earlier, generally wise stewardship" of the Island, it was in a different position from other places, which might, in fact, welcome a golf course. The developers, he said, stood to reap immense monetary profits and were acting in self-interest, to which they had the moral and legal right. "But getting their objective means many others, including other species, must lose," he said. Those opposed to the development were also acting out of self-interest, but their efforts were aimed at promoting the *common* interest, that which benefits the most people at the expense of the fewest. "We're also speaking for the land itself," he noted, "and for its countless, countless life forms, and for Islanders and visitors not yet born."

Mr. Agnoli referred to former state senate president Billy Bulger's efforts to remedy the "pitiful" fact that less than one-quarter of the commonwealth's coast was accessible to the public. "As intelligent and skillful as he was," Mr. Agnoli said, "his efforts yielded very little." Good public policy was required, he continued. "When large parcels of coastal lands become available, it is prudent for those who care about the common interest to *act*, to *buy* such land at market prices and set it aside for conservation and to create greater access to the water for the general public. This ... is a golden opportunity to do just that." Mr. Agnoli also opined that the DEM should be part of this process, and he urged the Commissioners to reject the proposal. There was some applause.

Mr. Donaroma said that he had two questions for the Applicant. He told the Applicant that the Applicant would have an opportunity to address the issues raised that evening. Also, there would be an opportunity to continue the Hearing on March 11. He asked if that was enough time. Rosario Lattuca said it was. So it was decided to continue the testimony, then to give the Applicant 15 to 20 minutes that evening to respond to a few of the issues raised.

Abigail Bailey of West Tisbury described herself as the mother of three children and said that she was concerned about the pollution issues, but in addition, about the increased air traffic that she thought the project would bring.

Glenn Hearn of West Tisbury offered general testimony. He said his background was electrical engineering and that for the last few years he had been teaching at the high school. Mr. Hearn offered a slide that showed the Edgartown Great Pond and the topographical contours of the site (from 0 to 10 to 50), as well as the groundwater lines. Typically, he explained, groundwater flowed perpendicular to the line of the elevation, so the audience could see that there was "a lot of stuff coming down." Since groundwater traveled at a half-foot a year, in 10 or 20 years the nitrates coming from up above would work their way down.

At high tide the pond was about 900 acres, he continued, and the watershed area was about 6,000 acres, which went all the way to the airport. So things that happen at the airport could come down through the groundwater.

Mr. Hearn highly recommended that the Commissioners get "an independent view" of the situation. Although he had great respect for Bill Wilcox, he felt that the whole scientific weight of it should not rest solely on his shoulders. He suggested that the Commission hire some consultants, extend the Hearing and get more input.

Next to speak was **Tony Balis of Vineyard Haven**, who warned about "end-running the facts." He quoted Will Rogers: "Everybody's ignorant, only on different subjects." (laughter) He then said, "In the spirit of Aldo Leopold, in the spirit of Rachel Carson, in the spirit of Henry Hough, let us remember that in a hundred years we still want this Island to have the same kind of spirituality it does now, and that spirituality is most securely grounded in the land in the way in which God made it," he said. There was applause.

John Ollen of Edgartown said that he had a difficult time understanding how Edgartown as well as various other groups, including some of the conservation boards there that evening, had consistently used Dr. Arthur Gaines as a credible expert, but now one was to believe that he had been co-opted or corrupted. "It's disingenuous at best," he commented. His second point was that he had heard no sound plan for an alternative land use. And thirdly, the give-backs were not bribery, he thought, but an innovative and generous model for future projects of this scope.

Gen Bennett of Edgartown described herself as a mother of two who lived about one-half mile from the site. She wondered about the public access and the path down the middle of the golf course. Why would she want to walk down the middle of the golf course when she could not even get to the water? she asked. (laughter) But, then, why would she want to get to the water if so many chemicals were going into it? She said she wanted her children to have "beautiful children, and not one-legged creatures." There was scattered applause.

Mr. Donaroma invited the Applicant to make a final statement.

Kelly Durfee Cardoza, Avalon Consultants, Inc.

With regard to pesticides and nitrogen, Ms. Cardoza said she wanted to ask Anne R. Leslie of ARK Enterprises and Stuart Cohen of Environmental & Turf Services, Inc., to speak briefly. The Applicant also wanted to respond to comments they had received in writing, as well as to bring back their team to respond to the other issues.

Anne R. Leslie, Consultant, ARK Enterprises, Inc., Alexandria, Virginia.

The time was 10:42 p.m. Ms. Leslie introduced herself as the president of ARK Enterprises, a consulting company that she had incorporated the year before after 18 years'

service with the Office of Pesticide Programs of the U.S. Environmental Protection Agency (EPA). She had been hired by the Applicant, she said, to do a peer review of the science for the project.

Ms. Leslie had served for three years on the U.S. Golf Association Green Section Research Committee, reviewing registration applications for a number of biochemical pesticides, and had been the EPA's expert on Integrated Pest Management. She had edited and supervised publication of the *Handbook of Integrated Pest Management for Turf and Ornamentals*.

Ms. Leslie said she firmly believed in reducing the amount of pesticides that were used on golf courses and finding alternatives to the more toxic ones. When working for the EPA, she said, she had represented the EPA on the environment committee that published *The Environmental Principles for Golf Courses in the United States*.

In reviewing the plan, Ms. Leslie found that the modeling, sampling and effects presented in the plan were "sound and supportable." She added, "No one is asking the Martha's Vineyard Commission to take risks." She had concluded that all the issues raised had been sensitively addressed in the plan for water issues, the wildlife habitat protection and the protection of threatened and endangered species to minimize the use of chemicals through a flexible management plan.

Ms. Cardoza then introduced Dr. Stuart Cohen.

Stuart Cohen, Ph.D., President, Environmental & Turf Services, Md. and Vt.

Dr. Cohen began by saying that he preferred question-and-answer sessions where he could interact. Mr. Donaroma assured him that "next week this board's gonna come to life." (laughter) Dr. Cohen said that he had been an environmental scientist, most of the time as a pesticide scientist, for 23 years. He had spent 11 years with the USEPA; in his last position there he had been in charge of the groundwater program in the pesticide office. He added that he had a Ph.D. in chemistry.

Dr. Cohen wanted, he said, to give some examples of how the work done by the Applicant's team had been mischaracterized selectively. For instance, Mr. Nelson had said that 6 percent was one of the lowest numbers in nitrogen leaching in the literature. "It's just not true," insisted Dr. Cohen. In most of the literature, he said, the data indicate the lowest numbers to be less than 2 percent.

Dr. Cohen said that everything that Mr. Nelson and Dr. Shirmohammedi had said about pesticides and the level of organic matter was completely true. But they had suggested that the testing be done after the surface soil had been removed. "This flies in the face of common sense," said Dr. Cohen. His people *had* brushed aside the leaf litter and the pine needles, but they hadn't then scraped off part of the topsoil. That would have produced an unrepresentative sample, he said.

A January 13 letter to Bill Wilcox had addressed in "excruciating detail" the issue of the overstatement of the organic matter, continued Dr. Cohen. There had also been a big emphasis on a 3- to 5-foot depth to water, talking about the bottoms of the greens being partially submerged. "That's also not true," he said. At the center of the site the depth to water was in fact 9 feet; the deepest part was 24 feet.

Mr. Nelson and Dr. Shirmohammedi had misrepresented certain data points, said Dr. Cohen, and had presented them out of context. It wasn't true that only one sample per land use had been taken; seven of the samples were composite and were not just looked up in a table.

Dr. Cohen also discussed whether it was seawater at the site or not. He said that Dr. Gaines had addressed that point. Also, Dr. Shirmohammadi had used a number in his analysis, 0.998, that was in fact valid for only one of the 11,000 days of Edgartown weather. Moreover, there would be no turf within 200 feet of the pond. He discussed this matter further. Then he spoke of the impossibility of the runoff problems promulgated by the Conservation Society's experts.

Finally, said Dr. Cohen, "You don't have to believe any of this." The data spoke for themselves. The truth was there in peer review literature, he said. One should not selectively take out data, twist them around, twirl them and put them into their algorithms.

Ms. Cardoza ended by saying she would see the Commissioners on the 11th. Mr. Donaroma thanked her and announced that the Hearing would be continued on Martha 11. Commissioner Richard Toole made a motion to adjourn the meeting, duly seconded. The meeting was adjourned at 10:53 p.m.

Continued Public Hearing. Meeting House Golf Club (DRI #471).

Mr. Donaroma opened the Continued Public Hearing for the Meeting House Golf Club proposal at 8:01 p.m. He began by reading the published announcement. Mr. Donaroma then explained that the format would be a little different that evening. He hoped that the board would open up with a number of questions for the Applicant. "It's our turn," he said with a smile. They would also hear from the audience again. Then the Applicant would get another chance to rebut any objections to the proposal or to answer any questions posed.

Rosario (Russ) Lattuca, Managing Partner, Meeting House Golf Club.

The Hearing began with the Applicant responding to comments from the Continued Public Hearing of the week before. Mr. Lattuca said that at that meeting it had been said that he wanted to build "a great golf club" as "a feather in his cap." "I want you to know, that is not true," he said. "What *is* true is that I want to be known for building a great golf course in an environmentally sound way." He had gathered an excellent team of scientists and naturalists, and the golf course had been designed around their findings.

Moreover, Mr. Lattuca said, he had no intention of leaving the Island. The Bigelow House would be moved back from the pond and would be his family's home. Finally, with Arthur Gaines' creativity, they would build the Great Ponds Center that would study all the ponds on Martha's Vineyard as well as monitor the golf course. To his knowledge, no other golf course had ever proposed such a center.

Jeremiah (Jerry) MacKenty, Speaking for the Land Sellers.

Mr. MacKenty read from a statement in which he proposed to clarify an issue that had been raised. He wanted it to be known that it was not, in fact, true that the land belonging to his family would or should go to conservation if the permits for a golf course were not granted. He continued that his family was "contractually committed and obligated to sell our property to the Lattucas for the construction of an environmentally sensitive golf course. Should the permits be denied, the Lattucas have the option to buy my sister's land and Maria's and my land (but not my brother's) for development as they see fit." He added that his family had "the highest confidence in the Lattucas and their team."

Kelly Durfee Cardoza, Consultant, Avalon Consultants, Inc.

Mr. Cardoza began by outlining why the Applicant felt that the proposed site was the right site. Long before there were three golf course proposals for the Island, she said, Mr. Lattuca had visited all the sites, and he had chosen the MacKenty site because: 1) on this site they would be able to capture a nitrogen plume, thereby protecting the pond (while

not requiring public financing); 2) there were no public drinking water restrictions there (the other two sites were in Zone 2 areas); and 3) the Vineyard Acres II site already offered public access, so a golf course there would not be taking away any access restrictions.

Arthur Gaines, Ph.D., Coastal Marine Policy Scientist.

Dr. Gaines commented on the testimony of the week before. "We heard some passionate and ... heartfelt testimony on the spiritual qualities of this land and of the Great Pond, and I must say, I share many of those sentiments," he said. He felt, though, that the forum for that testimony was two or three years before, when conservation groups had a chance to acquire the MacKenty land. The team, he said, had tried to "define how a golf course would have to be designed in order to meet the stringent environmental requirements necessary to site it at this particular site."

He admitted that some of the other types of testimony presented had been "frustrating in many ways. I feel that there was some earnest academic equivocation, there were a large number of errors of fact, there were red herrings and straw men. I think there was considerable and debatable nitpicking and even an embarrassing display of arrogance and public exhibitionism."

Dr. Gaines explained that he wanted to present an overarching picture of "what it is that is guiding our thinking about this project." These principles were: 1) that the design should be based on substantial expert information; 2) that there should be a built-in process to monitor that project to determine if the expert information worked; and 3) that if monitoring showed up some unanticipated quality, it would be necessary for the proponent of the project to agree to modify practices in order to correct for those deficiencies.

Dr. Gaines said he wished to make four points: 1) that drinking water was not an issue; 2) that the use of high-nitrogen groundwater would protect the pond for the foreseeable future, not just for five to 10 years; 3) that the monitoring mechanism proposed (the Great Pond Center) had been increasingly well-defined with drafted legal documents; and 4) the golf course management would be responsive to the findings and recommendations of the Great Pond Center.

Regarding drinking water, said Dr. Gaines, it was simply not an issue. The area was down-gradient from the wastewater treatment plant, and the irrigation well would be capturing as much of the treated wastewater from the ground as possible. The treated wastewater was not desirable for drinking; it was suitable for drinking only in its nitrogen content. The final point was that drinking water wells in the future would never be located in this site because of the location of the plant.

Dr. Gaines added that the point had been made that a depression of the water table would be a threat to the wetlands. "That's an incorrect assertion," he said. The level of groundwater at the margins of the pond was controlled by the elevation of the pond, and that was regulated by the Town of Edgartown four times a year by opening the pond to the sea. What happened inland was not a significant threat, he noted.

The nitrogen picture was favorable, Dr. Gaines explained. Anything that would be done to lower or to control nitrogen and stop eutrophication in the pond would be "advantageous and conservative." The groundwater beneath the Meeting House Golf site contained high levels of nitrogen. A specially engineered irrigation well would intercept the nitrogen and use it to fertilize the golf course. Their calculations suggested that it might be possible to remove enough nitrogen from the ground so that the total amount of nitrogen entering the pond from the groundwater would actually be reduced by the operation of the golf course.

The well for this purpose was designed to last from 10 to 15 years and at least for 6 or 7 years. When measurements showed that well was no longer capturing the amount of nitrogen needed, they proposed to link the golf course more directly with the wastewater treatment plant. If the water were captured at the plant at the secondary stage, the nitrogen capture would increase by a factor of five, he said.

The bottom line, emphasized Dr. Gaines, was that the nitrogen budget would be monitored by the Great Pond Center, and Meeting House Golf would modify their operations in order to fulfill the objective of capturing the nitrogen. The principal attack of this idea of the week before by Mark Nelson was both equivocal and debatable. If you used the new critical loading rate that Mr. Nelson had "concocted," even if you used that "phony" rate, with the capture of groundwater nitrogen you could still meet their goals.

Dr. Gaines said that he stood by the calculations they had come up with on what the nitrogen output would be. The numbers they had used for wastewater generation were Title V numbers, which Mr. Nelson had not used.

Dr. Gaines explained that the Great Pond Center would be independent of the golf course, with a nine-person board of trustees, five of whom would be appointed by the MVC, the Ponds Advisory Committee, the Conservation Commission, the Shellfish Committee and the conservation organizations that handle the restrictions on the Kanomika Point land. Base-level funding of \$450,000 up front would come from the golf course, along with \$125,000 annually, adjusted for inflation. The Center would apply for additional funding from suitable foundations.

Space for the Center would be provided in the Beriah Weeks House (1789). A considerable volunteer effort would be coordinated. Dr. Gaines then explained the various "wonderful programs" that the Center would offer. Most importantly, the findings of the Center, whose monitoring activities would be "comprehensive and independent," would regularly update the operation of the golf course.

Mr. Donaroma asked Dr. Gaines what was currently going on with the pond study group that he was involved with. Dr. Gaines replied that Meeting House Golf had sponsored some water quality measurements and some measurements that clarified how the pond mixed and distributed oxygen. One of the key points, he said, was that in the practice of opening the pond, stratification remained for a relatively long time, perhaps a week. This would make the pond especially vulnerable to eutrophication.

Commissioner Benjamin Hall, Jr., asked about the chart Dr. Gaines had shown outlining the comparative amounts of nitrogen in the site's present use, in the case of the golf course and in the case of 53 residential units. Dr. Gaines explained that the chart was reporting the amounts in pounds per year (532, -69 and 6,248, respectively).

Mr. Hall wondered if a base-line study of any of the pesticides to be used at the site had been done. Dr. Gaines said that this needed to be taken; we could not assume, he said, that the pond was pristine. If down the road pesticides were found in the pond, their source had to be provable. You mean, said Mr. Donaroma, you would need to find out where it's coming from. Right, said Dr. Gaines. For instance, Paul Bagnall had pointed out that there seemed to be "something funny about that pond," that the shellfish and oysters were not thriving; so a study might clarify where the trouble lay.

Commissioner Marcia Cini asked Dr. Gaines to help her to understand how soon one would spot a problem and what long it would take to treat it. Dr. Gaines replied that the monitoring began with the monitoring of the application of fertilizers and so forth; the next level would be right beneath the turf level, that is, how much had actually made it to the turf. If this last were "an alarming observation, we'd have that answer quite quickly, [in]

days, weeks." The monitoring of the groundwater would be somewhat later, he pointed out, and of the pond, somewhat later still. Some discussion of this ensued.

Commissioner Tristan Israel wondered if Dr. Gaines had an illustration of the irrigation well so the Commissioners could get an idea of "some of the dynamics." Dr. Gaines explained that Jesse Schwalbaum would later say a few words on the well. For now, Dr. Gaines would say that it was a large-diameter supply well sunk into the ground with screening and sand packed around the outside, much like a municipal water well. Dr. Gaines offered to have Mr. Schwalbaum respond immediately, but Mr. Donaroma said that was unnecessary.

Mr. Israel mentioned the Title V figures for the annual poundage of nitrogen for the different land uses that Dr. Gaines had shown that evening and noted that the figures shown the week before by Mark Nelson were "totally opposite." Dr. Gaines explained how the numbers shown by Mr. Nelson were based on a model put together by Horsley & Whitten that made assumptions about the relationship between land use and nitrogen loadings to the groundwater, between numbers and sizes of houses, including impervious surface and a large number of considerations.

In the talk given by Mr. Klein, continued Dr. Gaines, Mr. Klein had mentioned that the nitrogen loading rate from the houses was a value he had obtained from an MVC report done in 1998. That value, explained Dr. Gaines, whether or not it was correct, was much lower than the Title V values. He used Title V values, he said, because they were required to use it in calculating the golf course loading and because it was used in calculating *everybody's* loading. The point was, if you disallowed the amount captured by the irrigation well, of course the amounts of nitrogen going into the pond would be too great.

Mr. Israel referred to the capture of the nitrogen plume by the irrigation well. How long, he wondered, would that happen? It had been said the week before that eventually the plume would stop. Also, how far along was the Applicant in talking to the people at the wastewater treatment plant about a direct hookup. Dr. Gaines answered that, in fact, the plume would get greater and greater, but the level of nitrogen in the plume was reduced now to 3 to 3.5 parts per million. When the front of the plume had moved to where the irrigation well was, which might take 10 years, when the higher levels seen now could be expected to drop.

If the nitrogen reduction were not up to expectations, said Dr. Gaines, when they would go to the secondary stage and try to hook up directly with the treatment plant. This would increase the nitrogen capture by a factor of five, to about 15 parts/million. They had not, however, worked this out with the wastewater plant. He said he could envision Joe Alosso and the Selectmen supporting this plan in 10 to 15 years.

Mr. Israel then referred to the number of leaching rates that had been offered the week before. Dr. Gaines said that Dr. Stuart Cohen would be addressing that issue specifically later that evening.

Commissioner Linda Sibley wanted to know more about the organizational structure of the Great Pond Center. How many staff would there be, for instance? Dr. Gaines answered that there would be probably two part-time staff members on an ongoing basis, plus volunteers and other people who would be working in collaboration with the Center. There would be other sources of money to fund special programs, and staff members could be hired to work with those programs, based on the grants and contracts that were associated with those programs, explained Dr. Gaines. The director would be one of the part-time staff members? asked Ms. Sibley. Yes, said Dr. Gaines.

Mr. Sibley referred to the testimony from the week before that, in addition to the five community members of the board, there would be the director and three marine scientists. How do those three scientist get chosen? she asked. Dr. Gaines explained that the

objective of the board was two-fold: to assure the people of Edgartown and the various administrative bodies that the Center was in fact operating according to its goals and commitments; and to add something to what Edgartown already had, to try to bring in some scientists who could work with the board to inform them and to promote one of the objectives of the center, which was to conduct scientific research to conform policy and management not only of the golf course, but of the pond as well. Many details were not set, Dr. Gaines said, because he felt that the board itself should work out many of these things.

Ms. Sibley noted that Dr. Gaines' answer was "a little bit circular" because her question had been how the scientists were going to be chosen. After all, *someone* would have to choose them before the board of trustees came into existence. No, said Dr. Gaines, before the *full* board came into existence. He himself had three people in mind, but it would depend on the people named by the Island groups. He also explained about the "working groups" on various area of concern, that the whole point was involvement by the community.

Mr. Dan Taylor of Hill & Barlow has risen from his seat. Mr. Donaroma asked him if he had anything to add. Mr. Taylor identified himself as the development counsel and said that counsel expected to rely on Dr. Gaines' recommendation for the initial scientists on the board. Each would be on the board for a term of one, two or three years, as would everyone else on the board; once their term was up, the board (that is, the five members chosen by Island agencies and organization) would choose their successor.

Commissioner Jane Greene referred to the 1991 or 1992 study of Edgartown Great Pond, which had included a map indicating the different salinity levels at various points around the pond. Ms. Greene wanted to know when the pond had been opened in relation to those tests. Dr. Gaines answered that the field work had been conducted in 1990-1991. The objective of that report had been to characterize in quantitative terms the impact of opening the pond on the distribution of salinity and nutrients inside the pond.

So those conducting the study had carefully documented when the pond was opened, how long it was opened, how long it was closed, and so forth, he went on. It just happened that year, said Dr. Gaines, that the pond was opened, then closed, then a storm had come and opened it again. The highest salinity he had ever seen after the pond was "thoroughly mixed," he said, was about 25 parts per thousand. "It drops right down to eight or even six parts per thousand, and in the past it has gone totally fresh," he added.

Ms. Greene asked whether or not, then, Dr. Gaines knew exactly how long it had been since the last opening when that data had been gathered. Absolutely, said Dr. Gaines, adding that he could not recall the numbers on the spot but that they were contained in the report in the appendices.

Mr. Jason asked why the Applicant did not just go directly to the pipeline at the wastewater treatment plant. For a few reasons, replied Dr. Gaines. For one, the nitrogen in the ground was "quite a bit higher than what's coming out of the wastewater plant." Capturing that would prevent it from taking its way into the pond. Secondly, the team considered that this project was limited to the bounds of the property, and it was a viable site for such a well. A third reason was the amount of permitting necessary to hook into a wastewater plant; the State was working that out now. The Applicant would be the first ever to attempt this. "It could be troublesome. You know, sometimes permitting is troublesome," observed Dr. Gaines, to much laughter.

Mr. Jason wondered what guarantee the community had that the \$125,000 annual budget for the Great Pond Center would be there forever. Dr. Gaines answered that it was a legal commitment by the golf course in order to obtain the permits. In addition, the \$125,000 was linked to an inflation clause. Dan Taylor, development counsel, explained that there was an operating agreement that had been submitted to the Commission which spelled out

that Meeting House would provide at least \$125,000, CPI [Consumer Price Index] adjusted. "It's a contractual commitment," he said, "and the Great Pond Center can enforce it."

Wouldn't it be easier, asked Mr. Jason, just to shut the golf course down? No, replied Attorney Taylor. If the court ordered it, of course, he added. "I don't want it to get to the court," said Mr. Jason. "Well, we'd be happy to consider alternative mechanisms, if that would be appropriate," said Attorney Taylor.

Returning to the 6 percent leaching rate, Mr. Hall wanted to know if there had been any study of the organic material actually on the site. Dr. Gaines answered that Stuart Cohen would be addressing that issue. He added that he found the 6 percent rate "credible." In any event, the constant monitoring would answer that question with certainty, and that would affect their nitrogen budgeting.

Regarding the monitoring itself, Mr. Israel wondered if weather, for instance, a season of heavy rain or a drought, would affect their ability to monitor conditions. No, replied Dr. Gaines, but it *would* affect the *outcome* of the monitoring. So monitoring weather itself would be very important. Moreover, said Dr. Gaines, the Woods Hole Oceanographic Institution planned to operate a very sophisticated weather station out in Katama, although the golf course would have weather stations as well.

Jesse Schwalbaum, Senior Hydrogeologist, Earth Tech, Inc.

Mr. Schwalbaum introduced himself and said that he had been a hydrogeologist for about 20 years, studying extensively the groundwater on Martha's Vineyard for the past eight of them, working for the Towns of Edgartown, Oak Bluffs and Tisbury, developing new water supplies, inspecting existing water supplies, and developing the first detailed regional groundwater flow model for the Martha's Vineyard aquifer. For the Meeting House project, he said, he had been helping to evaluate and limit the potential for groundwater impacts.

Mr. Schwalbaum acknowledged that he appreciated the thorough review of the hydrogeological data that Bill Wilcox had done, as well as Mark Nelson's review for the Sheriff's Meadow Foundation. "Scientists in any field will always have a slightly different take on a given set of data," said Mr. Schwalbaum. "In a process like this, it's very important to reach some consensus on the essential issues." He thought that they were very close to such a consensus on the groundwater issues.

Mr. Schwalbaum noted that he would be submitting his findings in writing and that this evening he wanted to highlight "what it is we know, what it is that Bill Wilcox and Mark Nelson and myself can sit over a table and agree upon." On the issue of water supply, he mentioned that the site was not in a well protection area; in the search of Edgartown and Oak Bluffs for new water sources, it had become apparent how slim the pickings were.

With regard to the potential impacts of the irrigation well, Mr. Schwalbaum believed that the Commission staff was "pretty well satisfied with what we've done in evaluating this impact." Mr. Nelson had raised the issue of potential impacts to a wetland; Mr. Schwalbaum displayed a map that showed the maximum potential drawdown (6 to 7 inches) of the irrigation well proposed for the site.

Mr. Schwalbaum pointed out that Mr. Nelson had also said that the lowering of the water table was a problem because it was occurring at a critical time during the summer. Mr. Schwalbaum displayed a diagram that showed what he referred to as an aquifer's-eye view. During the springtime the root zones were inundated, he said; if this flooding did not occur, there would be encroachment from upland species. So the critical time for the wetland was during the high water table period, and there would be no impact from the pumping well at that time, he said.

In the summertime the water level would be lower, below the root zone, Mr. Schwalbaum continued, and the pumping would lower that just a little more. But because it was already below the root zone, lowering the table would not have any effect on the wetland.

Mr. Nelson had also raised a concern regarding the team's failure to outline the zone of contribution for the capture, Mr. Schwalbaum said. Actually, they *had* done it, although they "had not submitted it to the Commission because it was really not relevant to the discussions." Mr. Schwalbaum then displayed that zone and said he would be happy to give it to Mr. Nelson.

Others had raised the question of how one could capture so much nitrogen with just one well, continued Mr. Schwalbaum. "It's pretty straightforward hydrogeology," he said. He displayed a diagram showing the site, the well and the capture zone. "Hydrologically speaking," he said, "nothing could be simpler in terms of capture." He then showed a cross-section of the aquifer, which made this point even clearer, and discussed the whole process in some detail.

Regarding pesticides, Mr. Schwalbaum went on, when one looks at the pesticides that could get through the unsaturated zone of the water table, Mark Nelson's model assumed only a 10-foot mixing area. Now, people had wondered about the edge of the pond, about how there could be upward mixing with the downward movement of the water. Mr. Schwalbaum explained a diagram which showed the saltwater interface with the freshwater. The fresh water being lighter or less dense, it tended to float on top of the saltwater. So it is wedged up through the saltwater and discharged into Edgartown Great Pond, he said. "Now, *that's* what I call 'mixing'," Mr. Schwalbaum. Mr. Nelson's 10-foot mixing area, then, was very conservative.

Mr. Nelson had also raised the issue of the apparent depth to groundwater over the golf course; in areas where there was a depth to groundwater of 3 to 5 feet, the pesticide calculations would be invalid, Mr. Nelson contended, and it would be difficult to capture the recharge underneath the greens in the buffer zone. But when you looked at the actual map, explained Mr. Schwalbaum, the zone where there was a 5-foot depth to groundwater (i.e., where everything in the area was less than 5 feet) lay outside that zone (i.e., it was much more than 5 feet).

The time was 8:53 p.m. Mr. Donaroma wanted to know where the closest depth of groundwater was. It was probably about 7 feet, replied Mr. Schwalbaum, after consulting with Stuart Cohen.

Commissioner Tristan Israel how the system proposed would denitrofy the water. No, in fact explained Mr. Schwalbaum, the nitrogen would be used to fertilize the golf course. The plants would take up the nitrogen, he said, and about 6 percent would leach through. Would that figure include the fertilizer? asked Mr. Israel. Mr. Schwalbaum answered yes.

Commissioner Richard Toole asked Mr. Schwalbaum to address the concerns about rising sea level. "Rising sea level?" asked Mr. Schwalbaum. "I think it's going to be much too slow to worry about right now." Mr. Donaroma wondered, though, about the next generation. "The next generation, they're gonna have a lot more concerns than worrying about a golf course," said Mr. Schwalbaum. (This comment was followed by both laughter and grumbling.)

But the monitoring system would still be there? asked Mr. Donaroma. Yes, replied Mr. Schwalbaum, though he did not think there would be "any significant impact." The more important factor, he explained, was the pond itself, that is, was the pond going to be opened up more? *That* would have more of an impact than the rising sea level, he said. The rise in the sea level was only a couple of millimeters a year; over a hundred years, that

was only a rise of a few inches, affecting beaches more than the golf course. (More grumbling.)

With respect to the water sampling, Commissioner Ben Hall wanted to know if the team had tested for any pesticides. No, replied Mr. Schwalbaum. Were you asked to? wondered Mr. Hall. No, answered Mr. Schwalbaum.

Commissioner Megan Ottens-Sargent asked if there was an example of this sort of irrigation well elsewhere. No, there was the first he had ever heard of, replied Mr. Schwalbaum. Would it be controlled to the extent that the irrigation with the nitrogen-rich water would always be targeted for the golf course, or would it also flow onto the natural habitat? asked Ms. Ottens-Sargent. Only grass would be irrigated, replied Mr. Schwalbaum. Ms. Ottens-Sargent also had a question about the varying degrees to which different plants used nitrogen. Mr. Schwalbaum said that she would have to ask "one of our plant people."

Mr. Donaroma stated that he assumed that only the fairways, the tees and the greens were to be irrigated. Yes, said Mr. Lattuca. Mr. Donaroma added "and the clubhouse," to much laughter.

Stuart Cohen, Ph.D., Environmental & Turf Services.

Dr. Cohen began by reintroducing himself and noting that he had just submitted for the record copies of his curriculum vitae. His career started in the EPA, and in 1979 he was "sort of a scared kid" called to testify about banning a "nasty pesticide" that was contaminating groundwater. Afterward he figured that there must be other pesticides like that, so he and a colleague, Bob Carsel, re-evaluated all the pesticide data. That led to a whole program at EPA, and eventually another pesticide was banned. They received a couple of awards for that, he noted.

Dr. Cohen wished to rebut some criticisms that had been made the week before, then to talk a bit about the monitoring program. While his slides were being adjusted, he went ahead and answered some questions that had been posed by Mr. Hall, Mr. Israel and Ms. Ottens-Sargent. Regarding the monitoring, Dr. Cohen explained that there would be extensive baseline testing in that protocol in the pond and in the groundwater in order to demonstrate whether in fact they were impacting the environment, but also "to cover our bums."

On the irrigation issue, he explained, it would be counterproductive to irrigate the restored vegetation area or the native habitat areas because it would encourage invasive and non-native plants.

Mr. Schwalbaum explained two slides about risk assessment and pesticide regulatory review processes at Meeting House Golf. He showed the pyramidal progression of increasing detail and site specificity from the EPA at the bottom through the state review through agronomy-perspective and risk-perspective reviews and finally through the site-specific risk assessment, eliminating different pesticides at each tier.

Regarding runoff, continued Dr. Cohen, a risk assessment had not been necessary (although one was done) because the soils were very permeable and the treated turf was going to be at least 200 feet from the pond, the average distance being 540 feet. Part of the reason for this was regulatory, part of it "was sitting right over there -- Arthur Gaines," who had told the team that there had to be some good buffers with the pond. Fazio had designed the course very facilely within the existing topography, he added.

Dr. Cohen explained how he had designed highly sophisticated computer-simulation modeling, which was "not black magic" but the use of something that was laid out so that everyone could check one's assumptions. So, after the lengthy report, he had come to the

same conclusions that common sense had led him to already, that run-off would not be problem at this site.

To answer one of Mr. Hall's questions about the nitrogen rate, Dr. Cohen explained that the percentage of nitrogen that leached below the root zone could be less than the 6 percent figure that Mr. Nelson had insisted was one of the lowest values. Dr. Cohen displayed a slide regarding full-season turf grasses near the upper end of the range of nitrogen application rates that he was recommending in the management plan. The average had in fact been 1.6 percent; so using a 6 percent leaching rate was clearly conservative.

Mr. Hall asked about nitrogen use [inaudible]. Dr. Cohen answered that the Applicant had made a commitment in writing to William Wilcox that inorganic nitrogen would not be used anywhere on the golf course and that inorganic nitrogens did have a higher leaching rate.

Two of the opponents of the proposal had raised questions about the level of organic matter in the soil. This was important, Dr. Cohen said, because organic matter retarded the movement of pesticides in the soil and enhanced degradation. The first criticism had been of the 9 percent level of organic matter found in the upper layer and the assumption that pine needles and decayed leaves had been part of the sampling. If one looked at the actual data, the level was *greater* than 9 percent. Also, they *had* brushed aside the pine needles and the leaves.

The second criticism was that sieving would be done. This was *never* done at a golf course, emphasized Dr. Cohen, for anything other than greens and small-site sands. The agronomists, in fact, liked to have that organic layer.

Another criticism was that the organic matter level appeared too high. "What can I say?" asked Dr. Cohen. "We measured the organic matter. It is what it is." Granted, people were accustomed to seeing levels from the first half-foot or foot, and this study had been done with 2-inch increments. But all those increments had been averaged out.

A fourth criticism was that the sample size had been too low. However, there was only one soil series on the site that the golf course would be built into, and, in fact, the team had collected 27 to 45 sample and composited "a bunch" down to 19. This was adequate, he said.

What was meant by "composite"? asked Mr. Hall. This was an accepted technique, explained Dr. Cohen, so one did not have to do a series of independent analyses for a "bunch" of samples. So one took a number of samples from, say, a 100-foot radius. What about when the soil is moved for the construction of the course? asked Mr. Hall. Dr. Cohen replied that the soil would not get pushed from one end of the course to the other, that it would be within a span of 100 feet.

What kinds of samples were taken within a 100-foot radius?, asked Mr. Israel. Dr. Cohen answered that he was using 100 feet as an example, that he would have to ask his staff for specifics. What they had done was to composite woodland samples together and open-field samples together. If woodland was right next to open field, those two would of course not be composited, he explained. If they were doing a contaminant study, for example, they would not do a lot of compositing because they would want to find the "hot spots." But this was different, he said.

A final criticism had been based on figures that Dr. Shirmohammadi had come up with on the pesticide Chlorpyrifos. This was a pesticide that the Applicant was proposing to use on three acres in the maximum-pesticide-use area; the closest use to the pond would be 400 feet from its edge. The opponent had a bar that said that the predicted concentration would be 0.998 parts per billion, and he had compared that to water quality criteria for a

place where "living critters" would be swimming. This was "an invalid comparison," insisted Dr. Cohen. The figure had come from the quarter-inch or half-inch of water in the turf immediately after an intensive storm, which they had been looking at to see if in such a scenario the pesticide would make it to the pond. The opponent had also neglected to mention that this was the worst day out of the 11,000 days of actual Edgartown weather used in the model. The actual level at the pond would be 0.00 parts per billion.

The time was 9:20 p.m. Dr. Cohen then discussed a monitoring study protocol that he had submitted for Bill Wilcox's review. This would be the core of a greater research program that the Great Pond Center would be doing. He then gave an overview of what was contained in the protocol.

Dr. Cohen then noted that a lot of the comments had expressed a sincere concern about the possibility of having deformities caused by the use of pesticides. The context would be appropriate only if one were talking about a hazardous waste site, not a golf course. He had done a study of 36 golf courses in 17 states, and clearly it was shown that they should not be treated as hazardous waste sites. A number of the courses studied were on Cape Cod.

In any event, concluded Dr. Cohen, his team had come up with 16,000 data points, and the levels of concentration of nitrates in the groundwater was 1.6 ppm. In addition, the intensiveness of the study had not been nearly as great as that brought to bear upon the proposal being considered. The exceedence of pesticides had turned up in nine out of 12,000 entries. The average concentration of nitrates under surface water was low, 0.5 parts per million, and that of the great pond was even lower than that. And the exceedence of pesticides in the surface water was 0.7 percent.

So exceedences could occur, impacts could occur. What the team was doing was to guarantee that even those rare events would not occur at the site.

Mr. Donaroma asked if Dr. Cohen was saying that pesticides would not be applied within 400 feet of the pond. No, replied Dr. Cohen, they would not be applying pesticides with 200 feet of the pond. From 200 feet to 400 feet, he explained, there would be a limited use of pesticides, and then beyond 400 feet Chlorpyrifos would be used and then only in the worst-case analysis.

Dr. Donaroma explained that Edgartown had DCPC and Conservation Commission regulations that did not allow that application of pesticides within 300 feet of the pond. Dr. Cohen replied that they would be applying for a waiver (loud grumbling and laughter), and in fact they had already met with the Conservation Commission. He added that they were willing to work with the MVC and that the only pesticide they were proposing to use in that zone was more than 99 percent water and would be applied with a hand-held sprayer, that there would be no synthetic pesticides used, just bio-rational, organic ones, as well as a limited list of fungicides, which Michael O'Connor, the agronomist, would talk about.

Mr. Donaroma asked if all the models had been based on the management plan being proposed. Yes, replied Dr. Cohen. There were three levels in the management plan, and they had assumed the worst conditions in their risk assessment. So, asked Mr. Donaroma, if from now on we were to discuss using less fertilizer and fewer pesticides, would all the figures seen tonight get better? Yes, answered Dr. Cohen.

Mr. Jason asked what the EPA did when it tested pesticides. Dr. Cohen explained how there was a battery of about 20 human toxicity tests, ranging from acute to chronic studies; studies of ecological effects; studies of effects on fish, birds and honeybees; studies of crop residues; about a dozen tests on the mobility and persistence of pesticides; and studies of worker exposure and re-entry spray drift.

Mr. Jason said that he had a problem with the idea of pesticides as something that kills. Dr. Cohen countered that in fact pheromones were pesticides as well. Would the Applicant be applying pheromones? asked Mr. Jason. Dr. Cohen replied that they would be using both pheromones and non-pheromones. So what if they only used natural pesticides in the plan? wondered Mr. Jason. "It would be a big impact on the turf," answered Dr. Cohen, because there would be hard-to-manage disease problems like snow mold and a lot of weed invasions.

Dr. Cohen noted that he didn't use many pesticides and, in fact, no fungicides in his own year. But the golf course turf would be subject to greater stress than his yard was; the grass would be mowed close and 20,000 people would walk over it annually. Mr. Jason asked if the effects to avoid impacts included no impacts on the groundwater. Right, replied Dr. Cohen. These chemical would not get into groundwater, surface water or birds, and there were special mitigations set up to protect moth habitats as well.

Mr. Israel wondered where these substances went over the course of years and would they impact the pond. Dr. Cohen explained that the pesticides had half-lives that ranged from a half-hour to a maximum of weeks. While they were held up in the organic matter, the turf root zone was very bio-active, so the pesticides would mostly by "immeasurable" in the profile within a couple of weeks of application. Part of the monitoring protocol would include sediment analysis of the pond, so if there were to be bio-accumulators, which he didn't expect there would be, they would be caught by the pond monitoring program.

Commissioner Jim Vercruysse asked how the use of pesticides would affect "the little critters," for instance, mice and the creatures that killed the bugs. Dr. Cohen replied that there would be very little in terms of bio-accumulators. He reiterated that the moth habitat would be protected. Moreover, the bio-rational insecticides were often species-specific, and the special mitigation plan would require only hand-spraying within so many feet of the natural habitat.

What if Edgartown did not allow the Applicant to use insecticides within the 300-foot zone along the pond? asked Mr. Vercruysse. Because they would be using bio-rationals, Dr. Cohen thought the Applicant's case was strong. And there was just one herbicide, which was more than 99 percent water. It was the fungicides that could be a problem, he said, because there was a lot of disease. He emphasized that he was "totally open" to any suggestions from the Conservation Commission.

Mr. Donaroma referred to the putting greens, which would have a liner system that would collect the most intensively applied chemicals. The five putting greens in the Zone 2 buffer zone, explained Dr. Cohen, would have the liners, either synthetic or clay. "Why don't you guys consider ... pesticides only on the greens?" asked Mr. Donaroma.

He also pointed to the biggest problem, the fungicides and snow mold, which started in the winter and showed its damage in the spring, with plenty of time to "scratch some seed in there and get the grass going." Often, he said, the disease was just checked by the weather. Dr. Cohen interjected that there were also summertime diseases. "I understand that," said Mr. Donaroma, "but snow mold's a winterime thing, you've got time to seed it. This is an environmental golf course you guys are proposing ... *Forget* the pesticides in the 300-foot area, forget it." (applause)

The other way of taking care of weeds, added Mr. Donaroma, was mechanical; it was more work, more thatching, a thicker grass variety, a lot more labor and money, "but again, this is an environmental golf course," he said. "I hope you guys are considering this in your summation."

Commissioner Linda Sibley said that Dr. Cohen had testified that the practices being proposed were much more stringent and restrictive than was typical of golf courses. "Is there anyone anywhere, as far as you know, ... successfully managing a golf course totally

organically?" she asked. Yes, replied Dr. Cohen, there was the Applewood [sic] Golf Course in Colorado, located 6,000 feet above sea level, which did not have nearly the pest problems that could be expected on the Island. He offered a little on the background of the course. He also mentioned a course on Long Island that was "in pretty bad shape" that had stayed away from pesticides for the past two years.

Dr. Cohen related how he had lectured on this issue at a turf conference in 1994, and at that time he had come up with only two other examples. In those cases either there had been a special micro-climate or the course had not been in good shape. On the other hand, there were about 16,000 golf courses.

Regarding the organic matter percentages, Mr. Hall wondered if that data would change with all the topographical work that would be done. Dr. Cohen replied that the Applicant could almost guarantee that if one measured the particular organic carbon content from a particular spot on a particular day, that number would most likely be a little higher or a little lower.

What they would do, would be to have a commitment to a certain level of organic matter content in the root zone. How do you intend to keep it constant over time? asked Mr. Hall. "Oh, it'll build up," answered Dr. Cohen. The clipping would be left on the ground on the fairways and roughs; the clippings would be collected from the greens and the tees, which accounted for less than 10 percent of the total area of the golf course. The superintendent would build up the thatch layer from the beginning.

Mr. Hall noted that Dr. Cohen's model had spread out the effects of the pesticides and the fungicides over the 200-some acres of the site, yet the Applicant would only be managing about 80 acres or so. Shouldn't the calculations be focusing on those 88 acres? asked Mr. Hall. And what about the section closest to the pond, which looked like an area of intense use? Dr. Cohen explained that that was a smaller percentage of the site, which meant it would get a small share of the pesticides. He gave an example which included specific weights of pesticide used on the yearly basis.

Mr. Hall also wondered about geese. "That's why you've got dogs," said Dr. Cohen. Superintendents often paid a couple of thousand dollars for geese dogs, he explained. "So what to the geese dogs do for your aviary plan?" countered Mr. Hall. "They're trained, they don't go after rare birds," replied Dr. Cohen. (laughter) Actually, he had spoken to Vern Laux about that; the dogs would only go after the birds that were landing on the fairways.

Had there been studies on whether the geese were bio-accumulators of some of the pesticides? asked Mr. Hall. What if the geese ingested it and dropped it right into the pond? he wondered. Dr. Cohen explained that the focus in the past had been on organophosphate insecticides, like Dursban and Chlorpyrifos, which killed geese. Only on three acres was there *any* possibility that those would have to be used, he said. Dr. Cohen thought there would "not be much in the way of bio-accumulators." He added that he would be looking into the whole question as well as the insecticides. He would check with some "buddies" at the ecological effects branch of the EPA and get back to Mr. Hall.

Mark Mello, Director, Lloyd Center of Environmental Studies.

Mr. Mello said that basically he had been contracted to do the insect and moth habitat study for the project, as well as to wear the research coordinator hat. Previously he had done inventory work on rare listed species on pine barrens and grasslands in New Hampshire at Corcord Airport, on Cape Cod, in Plymouth County, the Connecticut River Valley and the barrens of Rhode Island. Also, Mr. Mello had been doing quantitative work at Camp Edwards, "where a lot of the numbers ... of the state-listed barren species are going to come from. The barrens on the Cape are very similar to the barrens here," he said.

Mr. Mello related how he had been hired by the Applicant the preceding September. Habitat was important, he said, because the moths, not being rooted in one place and constantly being chased by predators, were likely to habitate any areas similar to the ones where they have actually been spotted. Having come to the project only in the fall, Mr. Mello had been able to do only a habitat assessment, including a study of what the bugs eat and what the micro-climate requirements are, and an aerial interpretation of the habitat. Of the 25 habitat types that he had come up with, he had identified 15 potential state-listed moths across the area.

Basically the habitat on the Vineyard for state-listed moths was open-canopy scrub oak barrens, primarily frost pockets. He pointed to a map, which showed a frost pocket that was potential habitat for 11 species; this area would be avoided entirely. There were two, perhaps three, species in the wetlands; again, there would be no development there. There were one to two species in the grasslands; most of the grasslands were being avoided, and some grasslands area was in fact being restored. In addition, there were secondary habitats, which he would know more about when further study was completed. The Applicant would be satisfying any mitigation plan that might be proposed by the state.

Regarding the sampling design, which had been criticized the preceding week, *all* the flight periods of *all* the listed species would be studied. Any additional habitat discovered would either be avoided or disruption would be minimized or mitigated in accordance with the state's Natural Heritage Endangered Species Program.

Ms. Greene wanted to know when the full survey would be started. Mr. Mello answered that it would begin in April, then the end of May, early to mid June, late June, twice in July, early August, and then again in the fall. Each of those segments of the study would be conducted for a minimum of two nights, with four traps running each night, for about 64 samples, which was a huge sample, he said. The information would also be quantitative, he added.

Commissioner Christina Brown wondered if Mr. Mello could tell the Commissioners a bit more about mitigation for the loss of habitat and what the state programs required of the Applicant. Mr. Mello replied that the study was in its infancy and he could not say right then because the scenario of what was there or not there would determine what the mitigation would be. If the Applicant could not avoid a habitat, they would have to come up with a mitigation plan for that particular habitat. The mitigation might be management or acquisition, he would not know until the full study was done.

After the longer study then, wondered Ms. Brown, if mitigation was required, how would that affect the design of the golf course? Mr. Mello answered that in a worst-case scenario, there would be state-listed bugs on half the acreage of the site; but this was highly unlikely, he said. The Applicant would design around the most sensitive areas for the most sensitive species. Additional plantings might be required, for instance, butterfly weed. In some of the mixed scrub oak areas he expected he would find multiple numbers of listed species; on the other hand, perhaps there would be nothing there.

Mr. Hall asked if the Commission had yet received the invertebrate inventory. Mr. Mello replied that they did not have "an entire version." The time was 9:50 p.m.

Mr. Donaroma asked Mr. Lattuca if this period of rebuttal was going to be continued. Mr. Lattuca answered that there would be just one more short presentation.

Mario DiGregorio, Buckley Botanical Associates.

Mr. DiGregorio referred to the questions raised the week before about the wildlife habitat report, about its existence and its adequacy. His report, in fact, was an exhaustive study of wildlife habitat and rare species habitat found on the site. Not only had he done the

study, "but it was probably the *highlight* of my professional career. I just wanted that put on the record," he said. He had been out on the site for seven months with two "very fine" field biologists, amounting to 28 field days and incorporating 240 field hours, utilizing 22 permanent study plots and hundreds of walking transects and observation points. "I think it's impressive in its scope and its thoroughness," he added. "It's 121 pages long."

Mr. DiGregorio discussed in more detail the process he had gone through to accomplish the study. He said that the course designers had been very responsive to his input and that Plan 13 represented "a model of environmental sensitivity in golf course design, salvaging and saving rare species habitat and other wildlife habitat." He re-emphasized the fact that there was a wildlife habitat report.

Mr. Donaroma asked about future study. Mr. DiGregorio replied that he would be working with Mark Mello in the coming months.

Commissioner Tristan Israel asked, "What was your opinion of that area, as a wildlife expert?" Mr. DiGregorio wondered if Mr. Israel meant the entire 200 acres of the site; Mr. Israel said yes. "I thought it had *good* wildlife habitat," replied Mr. DiGregorio. "Anytime you have different plant communities interfacing with different habitats, well, there's *good* wildlife habitat." He added that as far as exemplary sandplain grassland habitat was concerned, those on the site were the top echelon of its type in New England, along with the alpine zones. "The sandplain habitat is characterized by the Natural Heritage Program and the Nature Conservancy as G-1/S-1 habitat," he explained.

Questions from the Commissioners to the Applicant.

Kelly Cardoza referred to the lateness of the hour and asked Mr. Donaroma if the Commissioners or the public had any questions; he answered no. Mr. Donaroma asked if the Commission Staff had anything to report. David Wessling answered that the Staff had prepared a report, which had been distributed to the Commissioners that evening.

Mr. Donaroma asked Mr. Wessling about "the tons of correspondence" he had heard about. Mr. Wessling replied that it was all summarized in the report.

Ms. Sibley asked the Applicant how membership would work. The materials stated, she said, that the club would have 250 regular members, of which there were 100 already, and 200 Island members. Ms. Sibley wanted to understand the mechanism of how a person became a member. How does one qualify for membership? she asked. Rick Miller, a founding member and a member of the club's steering committee, said that Meeting House now had 140 of the 250-person membership signed up. Mr. Miller described himself as "a permanent year-round resident." "What we're trying to do here," he explained, "is to build a membership of people that have a long-term commitment to the Island."

Mr. Miller had with him that evening the club's membership application, which included items such as, "How long have you been coming to Martha's Vineyard," "Do you own property on the Vineyard," "List your Martha's Vineyard affiliations and/or activities," and so forth. All 140 people had gone through a review process; every one had a major commitment to and a long-standing relationship with the Island, he said.

The seasonal membership would likewise be in that category of committed person. If you included four people in each family, there would come to about 1,500 people who would enjoy the recreational facility. In addition, the membership was very comfortable with funding the Great Pond Center, the monitoring system and the Community Partnership, he said. One of the reasons the course was so expensive, he explained, was because it was being built in a way that would not do anything adverse to the environment.

Ms. Sibley asked Mr. Miller to clarify a bit about the review process. Mr. Miller said the his committee reviewed the application, then gained first-hand knowledge of who the

applicant was and what his commitment to the Island was. How does someone qualify to be an Island member? wonder Ms. Sibley. "Actually, we do ourselves a disservice by calling them Island memberships," Mr. Miller said. "I consider myself to be an Islander, and I'm a regular member." Instead, they should be called *seasonal* memberships.

The seasonal memberships, Mr. Miller continued, would be available to people who on a year-round basis live on the Island and who desire a seasonal membership. Likewise, there would be a membership review process for the seasonal members, although that had not been started yet. And the fee would be lower for the seasonal membership? asked Ms. Sibley. "Absolutely," said Mr. Miller. Because they would play during the off season? asked Ms. Sibley. Yes, said Mr. Miller, and during the off-peak hours. "I don't think they'll play at night," he added, to much laughter.

Would there be any income requirements for the seasonal members, that is, could someone with a high income still be a seasonal member? asked Ms. Sibley. Only if he were a full-time, year-round resident of Martha's Vineyard, replied Mr. Lattuca; you could not just summer on the Island. So if you were a summer resident of relatively modest means, you could not qualify for a seasonal membership? asked Ms. Sibley. Technically, that was right, replied Mr. Lattuca.

Can an organization be a member? asked Ms. Sibley. No, answered Mr. Lattuca and Mr. Miller at once. How many guests could a person bring? asked Ms. Sibley. Mr. Miller said that the rules had not been established in that regard. Say I wanted to bring 45 guests, said Ms. Sibley. No, absolutely not, answered Mr. Lattuca. One could bring three guests at a time, perhaps more if it was during a slow time.

Did they have any seasonal members yet? asked Ms. Sibley. Yes, said Mr. Lattuca, No, said Mr. Miller, at the same time. (laughter) "We don't have the structure, but people have called us, and we have a list of their names," said Mr. Lattuca. But until there was an actual golf course, they were not taking any money from any Island person. Mr. Miller added that there was a membership committee that had not approved any of those memberships at that point.

Mr. Donaroma offered his impression that the format for membership was like that of the Edgartown Golf Club. Yes, said Mr. Lattuca, "it's a copy exactly..." Mr. Donaroma outlined the types of membership available at that club.

Commissioner Lenny Jason, Jr., wondered if it were a requirement that a person own a home on the Vineyard. "Not that you own a home," replied Mr. Miller, "but that you have some kind of a major commitment. If you've been coming here for 20 years and you've been renting for three months at a time, why, we'd consider that to be a major commitment. But home ownership puts you on a higher rung than not owning a home, but it's not an absolute requirement." Would the same be true for the seasonal members? asked Mr. Jason. Mr. Lattuca replied that for a year-round resident, it did not matter if he owned or rented his home.

Commissioner Anne Gallagher wanted to know if Mr. Miller had said that no one had to put any money up front to ensure their charter membership. No, replied, Mr. Miller. The 140 people *had* put up money, but the seasonal group had not. Was signing up charter members who put up money the priority of the Applicant? asked Ms. Gallagher. "We don't have 140 *charter* members," said Mr. Lattuca. "We have 30 *founding* members. They have put up money at risk." The other 110 had put down deposits, but the Applicant had no control over that money, which was being held in an escrow account. "Unless we build a golf course," explained Mr. Lattuca, "they do not lose any money."

So there would be no public allowed, said Ms. Gallagher. "The land isn't zoned that we could have a public golf course," said Mr. Lattuca. "It can only be for a non-profit private club."

"What do you consider a long-term resident, in terms of years?" asked Commissioner Marie Allen. Mr. Lattuca asked if she was referring to seasonal members. She answered yes. Mr. Lattuca explained that he could have moved to the Island anytime, so long as he was a year-round resident and this was going to be his home. "You said a person who ... demonstrates he has a commitment to the Island," said Ms. Allen. "You're talking about *full* membership," said Mr. Lattuca. No, said Ms. Allen, she was talking about the seasonal membership. All that was required, then, was that the person live on the Island year-round, said Mr. Lattuca.

There was some discussion about mixing up the requirements for the two categories of membership. Mr. Lattuca explained how the full members would have to demonstrate a long-term commitment to the Island, but they may be only summer residents. As for the seasonal membership, all that was required was year-round residence. At Mr. Donaroma's prompting, Mr. Lattuca added the requirement that they pay the \$500 annual fee.

"And how are these people going to be selected?" asked Ms. Allen. Mr. Lattuca referred once more to the list of people who had called. He added that probably they would have to have some form of lottery because of the "tremendous" interest.

Commissioner John Best asked how the privileges would vary, for instance, in the use of the restaurant. Mr. Lattuca replied that a full member would have complete use of all the facilities. A seasonal member would have the shoulder season, say, from October through May, and he would use the full facility. Moreover, it would not be a full-service restaurant but a cafe. And in the summer during the less busy hours they would have full use of the facilities. Unfortunately, they did not plan on being open for dinner, but probably some light sandwiches would still be available. Also, the pro shop would be available to them. What about the lockers? asked Mr. Best. A member would have his own locker, said Mr. Lattuca, and there might be a section for seasonal members to use.

Mr. Israel noted that the Commissioners' questions had been drifting into "a whole other area," and he wondered if there would be another opportunity to question the Applicant. Mr. Donaroma said, "Shoot."

Mr. Israel then asked where the summer help would be housed and would they impact the present ability of local businesses to find summer help. Herb Putnam, an agent of the Applicant, offered to answer the question. Mr. Putnam stated he was well aware of the outstanding housing problem on the Island. They had tried to work with the Regional Housing Authority to work out their contribution to the authority. The authority had indicated that they would like to work with the Applicant further in trying to solve the seasonal summer-help problem.

Mr. Putnam continued that certainly the Applicant could look at buying houses, but that would take the houses out of an already tight market and the small-business owner would be severely hurt. Edgartown was the only town with dormitory-style zoning, he said, up at the airport, which was currently not allowing it ... for safety reasons." It was a Catch-22 issue, Mr. Putnam said. He had spoken with the Planning Board in Edgartown and they were on the agenda with the Regional Housing Authority. "There is no answer, Tristan, at this particular moment," he said. The time was 10:15 p.m.

Mr. Putnam continued that when the golf course was permitted, there would be a period of two years they would have to work with the authority on the problem.

Ms. Sibley noted that there was a nationwide problem with getting seasonal workers. Had the Applicant looked at the question of whether or not they would be able to find the workers they needed? she asked. Mr. Putnam replied that they would create an good environment for people to work in and that they understood that housing would have to be provided. But you're aware that the existing businesses on the Island have had

"extreme difficulty" finding workers? asked Ms. Sibley. Yes, he was aware of that, replied Mr. Putnam.

Ms. Gallagher noted that she had been under the impression that there had been a great need for another golf course on the Island, and she had thought that perhaps it could be opened up so that people who were visiting for a time would get a chance to play, not just "an exclusive club for those who pay top dollar ..." Mr. Putnam explained, as Mr. Lattuca had earlier, that the zoning in Edgartown was for private, non-profit. The Applicant had tried to create an availability to Island residents, such as himself, he said. He noted that Farm Neck was structured in the same way.

Mr. Best pointed out, though, that *he* could play at Farm Neck, that if there was available tee time. But that's a public golf course, said Mr. Putnam. No, it is not a public golf course, countered Mr. Best. Mr. Putnam repeated that the zoning in Edgartown was for private, not-for-profit golf courses. But you do not have to be a member at Farm Neck, repeated Mr. Best. What he was wondering was if it was going to be available to the public. The Hearing got a little noisy. "End of subject," said Mr. Donaroma. He said that if it were a public golf course, "it would be a zoo." "Farm Neck I wouldn't characterize as a zoo," said Mr. Best. "I'm just talking about certain numbers of people there," said Mr. Donaroma.

Mr. Israel wondered if the Applicant could decide to hold a PGA tournament at the golf course. Absolutely not, replied Mr. Lattuca. Could there be weddings? asked Mr. Israel. No, said Mr. Lattuca. "We may have like a Friday night, you know, like a cookout type of things, like that, but very rarely ... It would be for members only," he said.

Ms. Greene referred to the Operating Agreement for the Great Pond Center and how there was a provision for fund-raising tournaments. "It would only be for Island ... charities," said Mr. Lattuca, "like the Boys' Club or something like that. We wouldn't make any money." There was further discussion of exactly what sort of fund-raising tournament would be allowed at the course. Attorney Taylor clarified some of these issues. He said that the Applicant would be happy to eliminate that pertinent clause in the agreement if the Commissioners wished, noting that it had been submitted as a draft only. But, said Ms. Greene, the Applicant had just indicated that there would be no tournaments. Attorney Daniel Taylor responded that the course would not have any kind of national, PGA-type tournaments, but local charitable fund raisers. Ms. Greene said that the wording in the operating agreement should be changed in that case. Mr. Lattuca expanded a bit on how limited these tournaments would be.

Mr. Hall asked how many teeings per hour there would be, six? Mr. Lattuca said yes. How many golfers would there be? asked Mr. Hall. Mr. Lattuca said they were using the figure of 20,000 rounds per season, but that was a high-end estimate.

Testimony from Town Boards.

Next, Mr. Donaroma asked for testimony from Town Boards.

Fred B. "Ted" Morgan, Selectman, Town of Edgartown.

Mr. Morgan wished to bring the Commissioners' attention to an article in that day's *Martha's Vineyard Times* by Nelson Sigelman, which, he believed, showed that the Sheriff's Meadow Foundation's tactics had been "questionable." "He did a great job," Mr. Morgan said. "I don't understand how a land-use organization can go to such an extreme objecting to this particular project and then go to another extreme to support another project, even to the point of selling ..." Mr. Morgan was interrupted by Mr. Donaroma, who told him to stick to speaking about the project. "It had to be said, okay?" said Mr. Morgan.

Mr. Morgan continued, saying that he hoped the project would go through; it would be a valuable asset to the Island. He spoke of the good works of the Edgartown Golf Club and the memberships there that were comparable to what was being proposed at Meeting House Golf. He referred to clubs being built on Nantucket and the Cape in recent years. "It seems to me that if these golf courses are such a detriment to the ponds and the environment, the EPA would have stepped in long before now, or DEP locally, and would have put a stop to these clubs," he said with emphasis. Moreover, the three golf courses already on the Vineyard simply did not pollute ponds, he added, discussing this further. Mr. Morgan then began "to say a few words about Arthur Gaines."

"Point of Order, Mr. Chairman!" said Commissioner John Best. His objection was that Mr. Morgan was speaking as a Selectman yet appeared to be speaking from a personal point of view. "I'm speaking as a *Selectman*," insisted Mr. Morgan. "because I feel very strongly about this ..." "Do the Board of Selectmen have a position on this?" asked Mr. Donaroma. Mr. Morgan answered no.

Mr. Morgan finished by saying, "Of all the experts that testified, Arthur Gaines is probably *the* expert when it comes to Great Pond ... And I think that Bill Wilcox is fast becoming an expert on the same subject. And I think that Arthur is a man of integrity, and if he thought for a second that this proposal would damage Great Pond, he would be on the other side of the issue." He added that he felt that golfers were conservationists also, and he encouraged the Commissioners to visit the existing courses on the Island. There was some applause as Mr. Morgan returned to his seat.

Paul Bagnall, Shellfish Constable, Town of Edgartown.

Mr. Bagnall said that he was there to answer any more questions the Commissioners had about Edgartown Great Pond. "A couple of hours ago, I think I heard Arthur [Gaines] state that we might have pesticide or toxicity problems in Edgartown Great Pond," he said. "After the oyster die-off in 1993, we had the sediment tested for toxins, which ruled out pesticide poisoning." He also had had the oysters looked at physiologically. He had concluded at that time that unicellular algae had proliferated, causing the die-off, then had died off naturally with the cooler temperatures in the fall.

Public Testimony in Favor of the Proposal.

There being no more Town Board testimony, Mr. Donaroma asked for statements from members of the public in favor of the Proposal.

Christine White of Edgartown, an abutter on the east side of the site since 1989, said she had known the MacKentys for 20 years and admired them. She said the MacKentys would not be leaving the Island but would be living close by. Ms. White had also spoken to the Lattucas, whom she had found "up front and forthright," answering any questions or concerns that she had raised. They were not here "to rape the land," but to build an environmentally sensitive golf course. Because the scientific testimony as a whole had presented conflicting data, Ms. White thought it was a "wonderful idea" to have the Great Pond Center to monitor the pond. The walking trails were also a good idea, she added. With the understanding that all activity on the course would cease if there were problems, Ms. White supported the Meeting House proposal.

Next to speak was **Dan Warren of Edgartown**, who pointed out that the land would be developed either as a golf course or residentially; therefore, one should look at the "best and highest use" of the property. If developed residentially, he said, it would probably another "private, upscale development open only to residents and invited guests, 53 trophy houses with an anticipated 27 guest houses ..." The children living in the homes would add to the already overcrowded condition at the Edgartown School (at \$8,351 per child). Additional vehicles would also be required, he said.

With the development of the golf course would be benefits, continued Mr. Warren. He spoke of the Community Partnership Program and its beneficiaries. Also, a center would be dedicated to the research of the Island's great ponds and environmental education for Island youth. Finally, a permanent restriction was to be placed on the entire 200-acre parcel to ensure that the land would never be used for more intensive development.

Barry Rosenthal of West Tisbury said that in 48 years he had never stepped onto a real golf course until the preceding year, when he saw a newly renovated Farm Neck. He had been in awe of "the beauty and scope of the landscape." Numbers could "be interpreted in many different ways to serve many different masters," he said. People needed to be realistic about what the ultimate use of the land might be. "And the choices seem few," Mr. Rosenthal said. Given the choice between housing and golf, the latter won hands down. As chairman of the Island Council for Youth (although he was not speaking as its representative), he viewed the course as another opportunity for kids to have more employment, learning experiences and interaction. Moreover, if the course turned to Island youth for employees, some of the housing problem could be eliminated. Finally, he said, the question of the course was about "all of us living together, making this thing work in the best way possible." There was some applause.

Bob Clermont of Old Purchase Road in Edgartown, across the road from Meeting House Way, approached the podium. An 11-year resident, he had come to enjoy the beauty of the Island, he said. He was concerned that if the site were not developed into a golf course, that a large number of homes, which would use pesticides and fertilizers, would crop up there instead. You could not tell those people not to use pesticides, he observed.

Mr. Clermont believed that the Community Partnership would be a "Godsend" to a lot of organizations on the Island. He spoke of the difficulty of raising funds on the Vineyard. If the land would turned into conservation land, it would no longer contribute tax dollars to the Town; as a golf course, it would have the best of both. The time was 10:37 p.m.

Next to speak was **David Blackburn**, a resident of West Tisbury Road in Edgartown for more than 20 years. He said that he used to take water samples between the treatment plant and the Great Pond. Nobody would know for certain whether or not the golf course would impact the pond until after it was built, he thought, and in any event, the proposal would not put any strain on the school system. He had thought in the past that golf was a rich, elitist sport, so he would welcome the opportunity to play it himself.

Sheila Muldaur of Chilmark, an Island resident of 26 years and a third grade teacher in Oak Bluffs, noted that she was not usually involved in issues like the proposal before the Commission. But having participated in the realization of the New Agricultural Hall in West Tisbury, she understood what public involvement could accomplish. She would rather see a golf course, she said, than 53 houses. "It sounds like this organization has done a good job of looking at the scientific issues," she went on, "and dealing with them so it won't hurt the pond." The Island needed to avoid just "peppering" the landscape with houses, instead. There was some applause.

Chris Morse of West Tisbury said that he was in support of the proposal. "I feel those involved have been and will continue to be as responsible as possible," he said.

John Ollen of Edgartown said he had listened to some 10 hours of testimony and read some 60-odd pages of submitted materials and innumerable letters to the editor, listened to reports on local radio, even National Public Radio, all with regard to the proposed golf course on the Edgartown Great Pond. The proposal had many ramifications, some social, some environmental, some fiscal, and all political. He characterized the whole affair as "a decision for the new millennium."

Mr. Ollen believed that the Applicant's approach was environmentally sensitive, detailed and "malleable." The team was composed of many people already familiar to and trusted by the Commissioners as well as by the community at large, and a large number of donations to the community were part of the proposal, he pointed out. He proceeded to outline some plans for the Community Partnership Program. He advised the Commission to insist upon the strict monitoring that had been proposed, and he urged the Commission to approve the Application "not with trepidation but with the confidence that you have provided reliable safeguards to protect the pond, and that would be in the best interest of all of us." There was some applause.

Mike Cassidy, an Edgartown resident for 19 years, was in favor of the project "not because I can analyze the science and know what it means. But I trust the integrity of the people that have put a lot of time and work into this project." Mr. Cassidy wondered if Representative Turkington's piece in the newspaper would influence any of the Commission members. But, he said, "the MacKentys didn't know that he had ever been on the property." Where were Mr. Turkington's experts and scientists? he asked.

Addressing Mr. Donaroma, Mr. Cassidy noted that the former did "a beautiful job of maintaining large areas of grass very close to the pond." "I don't notice that," quipped Mr. Donaroma, to some laughter. Mr. Cassidy continued, "I think it's a good point that the people in golf course management come to the people that are now maintaining grass and doing a beautiful job near the Great Pond without harming it."

Mr. Donaroma announced that he was going to switch to some testimony in opposition. He noted that some people had already had "a bunch of time" and asked that they give some others, who had not yet spoken, a chance to be heard. If the scientists did not get to all of their rebuttal, he said, the written record would still be open.

Public Testimony in Opposition to the Proposal.

Tara Hickman of Edgartown began by saying that LLC was a legal term meaning limited liability company. She said she had spoken with the Attorney General's office, specially the office of LLC, also known as 156(c), Section 2, and had learned that it was "an unincorporated company of two or more members." Ms. Hickman claimed that Meeting House would never be a non-profit organization because all non-profits were incorporated, that is, they were 501(c)(7) organizations. She claimed that the LLC's members were not personally liable or accountable. If there were a problem, no one would be responsible, she said.

That area was zoned, Ms. Hickman went on, for commercial/residential only. The zoning provision that could be extended to the site would have to be educational, church-related or non-profit, she explained. She reiterated that an LLC cannot ever be a non-profit organization; it as a for-profit venture and its primary purpose was to make money. She then repeated what she had said earlier about the meaning of LLC and the absence of responsibility such an organization would have. There was applause.

Andrew Woodruff of West Tisbury, proprietor of Whippoorwill Farm, noted that the presence of too many former EPA employees kind of scared him. "But I won't go there," he said. Speaking of the organic sample figures submitted by the Applicant to the Commission, he said that it was "impossible" that there was 9.5 percent organic matter in those soils. "I will bet my entire farm on that," he said. Because of moisture content and the intense fog in Edgartown, disease pressures in that environment were probably worse than anywhere in the Commonwealth, he explained. So an increased use of fungicides was a real possibility. He also contended that organic content would not increase in sandy soils under an intense chemical regime; it would in fact *decrease*.

The entire biology of the soil would change, he went on. No one had spoken about soil biology, Mr. Woodruff said, a very important factor to consider. He also wondered how

many toilet flushes would occur each day on the site as opposed to under a residential use. It could not be assumed that a golf course would serve the land better than residences. Why not ten 20-acre lots with two-acre building envelopes would keep intact 180 acres, he pointed out, retaining 90 percent of the flora and fauna? Or perhaps there could be 20 ten-acre lots with two-acre building envelopes, keeping intact 160 acres, or 80 percent of the property. A third option, he suggested, would be to build a clustered development, with more house lots, while still preserving as much as 75 percent of the 200-acre parcel. The time was 10:50 p.m.

A comparison of 30 housing units to 100 acres of a mono-climate with artificially maintained turf full of fungicides, insecticides and fertilizers and needing "tons" of water led him to question seriously the environmental impacts. Moreover, turf management would ultimately destroy the biology of the soil, and the turf would be less able to resist diseases and insects. The likelihood of leaching, he said, would then be even greater.

If the groundwater was polluted, he asked, how many years would it take to flush out the impurities? Throw in a second golf course across the street, and it would take twice as long. They would wind up pointing fingers at each other, he said. Who was to be responsible? Who would be the enforcer 20, 30 or 50 years down the road? he asked. "Their sincerity may be bona fide, but the reality leaves us with little assurance of the protection of the pond," he said. Such pledges should not be considered in the approval of the proposal. He also pointed out that the off-Island jet-setters who would be donating the money to Island organizations should be willing to contribute regardless of whether or not there was a golf course.

Finally, Mr. Woodruff called on the Commission to look at the cumulative effects of golf courses on both the Vineyard Acres II property and the MacKenty property. He urged the Lattucas to come up with a joint venture on the Vineyard Acres II parcel as an alternative to two separate courses. And he encouraged the MacKentys to reconsider bona fide offers from conservation groups. He then discussed his unconventional proposal for affordable housing. There was hearty applause.

Mr. Donaroma asked for any *new* testimony. Prudy Burt of West Tisbury was against the proposal for all the reasons previously stated, in addition to a few more. She could not decide, she said, what about the proposal offended her most. She then enumerated those aspects of Meeting House Golf Club that offended her. One didn't have to be an expert to realize that there would be negative impacts to the land and the pond. She then read from the Commission's enabling legislation. Ms. Burt finished by observing that the Island was at a crossroads and that the Commission was the "last, best line of defense against this loss of our Island heritage, and I have great faith in the power of your legislation to back you up in voting no against the proposal." There was applause.

Charles FitzGerald of Chilmark submitted a statement and some copied materials to the Commission. He said he was one of those who felt that "a golf course is *not* a benign landscape." He viewed it, instead, as an industry with a heavy dependence on toxic chemicals which could best be described as "a large-scale, continuously leaking toxic waste dump." He had suggested to the Applicant last summer that they run the golf course organically; they were not interested, he said.

He discussed further the types of chemicals to be used and their effects on the environment and the health of greenskeepers. A recent study had suggested that there was a quick outflow of nitrates from golf courses into the groundwater and streams, contrary to the claims of the Applicant's paid consultants. What worried him even more, he said, was what was *not* known about these chemicals. "Of 96 herbicides, 55 insecticides and 30 fungicides in common use today, the EPA has established the aquatic life criteria for only six," he said. "How can we trust the EPA, anyway? Of the 36 pesticides most commonly used by Americans on their lawns, 32 have never been fully tested by the EPA." He called this "a national disgrace and an economic disaster."

Mr. FitzGerald went on that he had heard the testimony of Stuart Cohen, a former EPA employee, and he wondered if he could trust his expertise if his major clients were golf courses. Mr. Cohen himself had experienced the cheating and obfuscation of data that went on in the industry, and in the absence of studies, the EPA *accepted* this data. Mr. FitzGerald challenged the Applicant to sit down with the conservation groups to decide exactly what the criteria were which, when met, would shut down the golf course. Moreover, there was no place on the Vineyard for a chemical like Chloropyrifos, he said. Would they be willing to forego the use of pesticides that had not be tested, which would include most of them? he asked.

Mr. FitzGerald then showed an infrared map lent by Bob Woodruff which showed the Edgartown Golf Course. The map showed how the area of the golf course was different from the surrounding regions; what one was seeing was a fast-growing area that had been overfertilized. "Golf courses are *different*," he said. "We have to give them a real careful look before we decide to allow this to happen." There was applause.

Mr. Donaroma opened up the meeting to any general comment. He encouraged those who had not already testified on an earlier evening of the Hearing to come forward.

Dick Johnson, Executive Director of the Sheriff's Meadow Foundation, said he had not planned on saying anything. He wanted first to clarify a point that had been made in an Island newspaper about the foundation. "Sheriff's Meadow Foundation has no financial interest whatsoever in the proposed golf course [that is, the Vineyard Acres II course]." The foundation had, instead, an agreement with Swanson Ventures to sell them four building lots in that subdivision if the foundation approved of the final plans for that golf course. The entire proceeds of that sale, if it took place, would be offered to another conservation group or to the Town of Edgartown. In addition, there were no conservation restrictions on those four lots.

Mr. Johnson said he wanted to focus on the impacts of Meeting House Golf Course on the land surrounding the pond. He referred to a comment of Virginia C. Jones of West Tisbury a few years before that a particular property was just "a bunch of puckerbrush," but it was Martha's Vineyard puckerbrush and therefore it was *important* puckerbrush. To get a "more objective view" of the land in question, he said he had studied all the data from both the experts hired by the Applicant and the experts hired by the conservation groups.

Regarding the value of the woodlands as nesting habitat for birds, Mr. Johnson had asked Trevor Lloyd Evans, a senior scientist at the [inaudible] Center for Conservation and a member of Partners in Flight, to review the list of birds that Vern Laux had provided. Dr. Evans said that six of the species listed were on particular concern, and three of them appeared on the Partners in Flight 1996 National Watch List: the yellow-billed cuckoo, the Eastern wood pewee and the gray catbird. The other three species were on the Massachusetts Recommended Species List: the Eastern kingbird, the Eastern phoebe and the Eastern towhee. Dr. Trevor had also pointed out to Mr. Johnson that the catbirds and the towhees were considered of special priority in southeastern Massachusetts according to Partners in Flight. In summary, said Mr. Johnson, this was important nesting habitat.

Mr. Laux had, moreover, emphasized the site in its role as a staging area for migrating songbirds, continued Mr. Johnson. He then read directly from Mr. Laux's report. Mr. Johnson explained that Dr. Evans agreed with Mr. Laux's conclusions in this regard. Mr. Johnson had then contact Dick Viet, who co-authored *The Birds of Massachusetts*. Subsequently, Mr. Viet had written to the Commission about the importance of the areas around the Edgartown Great Pond as a staging area. At that particular stage of a tropical migration, the birds had to eat enough to gain 1 to 2 percent of their body weight each day; some of them gained as much as 40 percent of their body weight in five days. Many

aspects of the migration and this process had been uncovered only recently, continued Mr. Viet's letter.

The Applicant had stated, said Mr. Johnson, that there would be "no impact" on the wildlife habitat. Mario DiGregorio's report clearly contested that, he said. Mr. Johnson then read from Mr. DiGregorio's report, including material about the 22 ferryloads of equipment coming over to the Island that would be required to carry out the proposal. "There's going to be a very different landscape around the pond," stated the report.

Moreover, Mr. Johnson went on, the Applicant had provided very little information about what pesticides would be used and in what quantities, said Mr. Johnson. Arthur Gaines had referred to the approach as "spoonfeeding the pesticides." Referring to the chart "Projected Maximum Pesticide Use from Meeting House Golf, LLC," there were four fungicides listed at over 400 pounds annually. Others were in the 150-pound range. "But, still, that's a rather large spoon," observed Mr. Johnson. If one totalled the annual usage of pesticides on the charts, it came to more than 4,000 pounds, or 2 tons, annually.

Of the pesticides listed as being proposed for Zone 2, there were over 350 pounds of fungicides proposed per year, said Mr. Johnson. "This is the *wrong* place for a golf course," he again emphasized. "If you need that amount of fungicide to build near a pond, you're building in the wrong place."

Mr. Johnson also read from a recent article in *Sanctuary* magazine, a publication of the Massachusetts Audubon Society. According to the article, there was mounting evidence that organo-phosphates, which would be used at Meeting House, may kill wildlife as assiduously as DDT once did, being one of the most dangerous classes of pesticides for animals. The article also mentioned so-called nonlethal effects. Among those were a decrease in the amount of parental care of nested young, lethargy, reduced foraging effort, embryonic deformities and the inability to defend territory. Organo-phosphates could also affect the sense of migration orientation in birds.

Mr. Johnson made the point that the ecological importance of the site extended beyond its boundaries. He described all the lands that surrounded the site and were part of the Great Pond's watershed, making this area "a real keystone." Professor John Atwood of Antioch College has written to the Commission at Mr. Johnson's request to describe the overall fragmentation impacts the proposed golf course would have and the destruction of 4 acres of grassland, sandplain and moorland that could not be re-created. Construction of the golf course would, moreover, reduce the value of nearby conservation lands.

Finally, Mr. Johnson described how Mr. Laux had proposed putting hundreds of birdhouses all over the golf course. Was this our vision of Martha's Vineyard? asked Mr. Johnson. He referred then to Joni Mitchell's song Big Yellow Taxi: "Don't it always seem to go, that you don't know what you've got 'til it's gone." There was applause.

Next to speak was **Candace Hogan, an Edgartown resident** and abutter of the proposed golf course. Most of her most serious concerns had already been addressed by others, she said. She and her husband had rented in Island Grove for five years, and they had bought a house on Meeting House Hill, one mile down the road from Island Grove. She noted that there were be noise, pollution and traffic congestion generated by the project that she could not have anticipated when she purchased her home. These were clearly quality of life issues, she said; although not quantifiable, they were no less real or substantial. She was counting on the Town to ensure that all necessary precautions were taken on the site. The Meeting House Golf Course would essentially be "an industrial complex," she added, not the residential additions she would have expected. She "implore[d]" the Commission to reject the proposal.

James Athearn, an Edgartown resident and co-proprietor of Morning Glory Farm, disclosed that he farmed some of the land on the site, bringing in about \$20,000 worth of

crops from that area (4 acres of corn, 2 acres of potatoes, 1 acre of mixed crops and about 5 acres of hay). Mr. Athearn had brought with him the results of soil tests from 1997 done on property he farmed which indicated a far lower organic matter level than the 9.9 percent figure offered by the Applicant. He admitted that he leased the land on a year-to-year basis, so he could not manage the land as well as he would like. The organic content was 2.2 to 1.5 percent for the hayfields and 1.4 percent for the cornfields. The nature of porous soil, he explained, was that it contained a lot of oxygen, which made the biological activity much more rapid, breaking down the organic matter more quickly. Mr. Athearn then submitted a letter he had written. There was applause.

Next to speak was **Debbie Athearn of Edgartown, co-proprietor of Morning Glory Farm**. She began by saying that she respected the MacKenty family, who had been very helpful to the Athearns. Mr. MacKenty had shown her the original plans for an ecologically sound golf course, about which he had been enthusiastic. Ms. Athearn viewed the plan as it now stood as "extremely detrimental to this precious area." She then spoke about the value of the land and the respect she had to it. "From a selfish perspective, I don't want to lose the ability to grow crops on this land," she said. But that was not the most important thing; saving a natural resource in its natural state was most critical. "This land is far too valuable to be taken over as a playground from the few," Ms. Athearn observed.

Moreover, she questioned the validity of studies that found that the course would have no impact on the environment. "There will be so many changes, I don't see how they can say it," she said. Where would the deer, for instance, made their new home? she asked. Why destroy what people visit the Island to see in order to build something that *any* town could build? Ms. Athearn then related an incident from a farm conference she and her husband had attended the week before, when a farmer had urged the others not to lose sight along the way of what was important. What is your character and your vision of who you want to be? the speaker had asked. There was applause. The time was 11:30 p.m.

Jim Novack, director of the performing arts center, spoke glowingly of the Community Partnership. He said that the organizations chosen engaged in many activities that would enhance the lives of many people on the Island. Fund raising was becoming increasingly difficult, he noted, and all the beneficiaries had "very altruistic goals." He outlined some of those benefits and finished by adding that this aspect of the proposal was "very, very worthwhile."

Marty Nadler of Oak Bluffs began by saying, "I don't like golf." He was there that evening because Jim Novack, Bob Mone and Herb Putnam had brought him. He had known these men for many years, and he knew that they cared about the Island. "I know that they'll never get 53 homes on that golf course, if it's not a golf course," he went on. He had worried about speaking. For instance, he saw in the audience his son's English teacher, who opposed the proposal. What his son get a bad grade if Mr. Nadler spoke? he asked with some jocular. (laughter) "I see two groups pointing their fingers at each other," he said. "I think it's your [the Commission's] job to get their hands together." Everyone could benefit from the golf course, "and that's my idea," said Mr. Nadler. There was applause. "I think he just outlined our job, ladies and gentlemen," said Mr. Donaroma.

Mr. Donaroma asked the audience to keep in mind that he was going to close the Hearing "soon" and that written materials could continue to be submitted for a few weeks.

Brendan O'Neill, executive director of the Vineyard Conservation Society, said that the VCS had gone on record as opposing this development. He had invited the three specialists who had spoken at the last meeting to return to hear the Applicants and respond to their comments and questions. They would like that opportunity, he noted, but were prepared to submit their responses in writing.

All could agree, observed Mr. O'Neill, that the golf course development plan presented "at the very least a confusing picture as to the science." Given that uncertainty, the appropriateness of the site remained an open question. Given that uncertainty, the potential for adverse effects on people and property remained real. "Why take the risk?" Mr. O'Neill asked. "We urge you to disapprove the plan." There was applause.

Rosario Lattuca, the Applicant, offered that given the late hour, it would be more appropriate to respond to the latest input in writing. Mr. Donaroma said that was up to him. Mr. Lattuca said that was his wish.

In the cacophony of voices that then erupted was talk was a "filibuster" and claims that there remained people who wanted to speak. Mr. Donaroma asked if there was any *new* testimony and emphasized that the Hearing would be closed that evening.

Bob Woodruff, an employee of the Vineyard Conservation Society, outlined his training in wildlife management and related how he had been walking around the coastal environmental all his life. He would abbreviate his statement about habitat fragmentation, he said, and would be submitting it in writing. Habitat fragmentation was the physical undoing of a complex matrix of life forms in a natural system, he explained. A natural disaster, such as a hurricane, a great flood, a lava flow or an earthquake, can cause major habitat fragmentation. But the greatest cause of it worldwide, he said, was man.

Mr. Woodruff read a statement in a handout of the Massachusetts Audubon Society from 1997 that "a golf course is fundamentally an artificial landscape that requires intensive maintenance and does not substitute as a natural habitat for any native wildlife species." While some wildlife could survive in pockets of the artificial environment, many could not, he read. From a biological standpoint, a golf course was a poor substitute for a forest or a natural grassland.

Mr. Woodruff displayed two slides that demonstrated how a major portion of some habitat areas would be consumed by the golf course design. In an earlier site plan, the clubhouse had, in fact, been "smack on top of a sandplain." Now the first tee was on top of the sandplain habitat. He also pointed out other "very good habitat" that would be fragmented by the golf course layout.

The Applicant had proposed to replicate 10 additional acres of sandplain habitat, Mr. Woodruff said. Why destroy the sandplain, then try to re-create it elsewhere? he asked. And it was "a daunting task at best" to try to reproduce a sandplain. Once the fairways were put in, there would be "miles" of long, narrow bands of trees about 300 feet in width with no shrub border remaining in transition to the roughs. "This simply doesn't constitute good cover for wildlife," he insisted, "nor suitable nesting habitat for bird species, nor the shrub growth so many birds depend on for a food source."

Mr. Woodruff also quoted from page 4 of Vern Laux's report, reading about the site's being an important staging area for migrating birds. He concurred with that assessment. However, no number of birdhouses erected on the property was going to replace the thousands of oak and pine trees supporting millions of insect larvae upon which the hundred of thousands of migrants relied to build the fat reserves needed for their "remarkable" trek to Central and South America. Nor would they support the 42 landbird species of residents on the property.

Clearly the loss of hundreds of thousands of tons of bio-mass would have serious consequences for all vertebrate and invertebrate species, from moth to red-tailed hawk. Only 8 percent of the 42 species normally used artificial nest sites in any event, said Mr. Woodruff. Meanwhile, the habitat for the remained species would be seriously compromised or destroyed. "It is the cumulative effect of habitat loss such as this over the regions of the U.S. and the world which is the major cause of the declines of thousands of

species of plants and animals worldwide. Let's not contribute to a problem of global significance," concluded Mr. Woodruff. There was applause. The time was 11:47 p.m.

Joan Shea of West Tisbury spoke next. Ms. Shea felt that due to the scale of the project, the environment would have to be affected by it "dramatically." The Applicant's team had insisted that they needed to do more studies. Ms. Shea thought that at this stage, "they would have taken into consideration the geese, the birds, the moths, *everything*, and I'm sorry that they haven't," she said. "You need to know this information *now*."

Ms. Shea also questioned the wisdom of having only two part-time employees at the Great Pond Center. "I think that someone who has that type of responsibility would want more of an investment if they were going to be an employee," she observed, "that they would want more than a part-time job ...". She contended that if the Island wanted a committed employee who was really interested in the center, they would have to hire someone full-time with benefits. She finished by noting that the Great Pond belonged "to all of us" and that a golf course was not what she wanted for that area. There was applause.

Peter Guest of Vineyard Haven, who described himself as a carpenter and kayak instructor, said that the Edgartown Great Pond was his favorite pond on the Island for kayaking. He had moved here from Newport, R.I., and he described the bridge built to that city when he was young, which caused the natural places to disappear, the groundwater to be spoiled and the downtown to be gridlocked.

Mr. Guest had lived on the Island for 22 years and had seen what had been happening here. "We look to sciences for answers," he said, "and we don't seem to be getting anything definite. We know that there[re] *two* plumes, one from the septic treatment plant and one from the dump ... headed to the pond. Nobody's sure what they're going to do." Mr. Guest wondered if the Island needed to do this experiment. "Surely, there are better usages for this land," he added. "Certainly, conservation would be the best usage, I think." Mr. Guest noted that "the Devil is in the details" and that the golf course would involve "a regulatory nightmare." He urged the Commission not to let this happen. There was applause.

Next to speak was **Juleann VanBelle of West Tisbury**, noted that one of the goals of the DRI process was to determine if the benefits to the largest community outweighed the negative impacts. If this were a public golf course, she said, some of the benefits would, perhaps, justify the development. "However, I believe that the list of both real and potential detrimental impacts to the Vineyard community deserves serious consideration," she said.

Regarding pesticide use, Ms. VanBelle pointed out that at the start of the century, Americans had a 1 in 20 chance of developing cancer. Since the second world war, more than 70,000 chemicals had been introduced into the environment, and now 1 in 3 Americans could expect to develop cancer. A connection between the use of chemicals and the cancer rate in humans had been established, she said. Dr. Gaines himself had spoken of the uncertainties encountered when chemicals are combined in different ways, she noted. In May alone, there would be a combination of 14 different chemicals, six to eight of which had a very high aquatic toxicity level; in September, eight would be used, also with a high toxicity. She wanted the EPA experts to return and explain how these particular chemicals had been studied, including in combination. She doubted that the EPA had studied such interactions.

While integrated pest management sounded like a reasonable approach, she went on, IPM meant different things to different people. Frequently the choice of whether to apply pesticides was an economic decision. The Silent Spring Institute on Cape Cod, which was researching the high rates of cancer on the Cape, was specifically looking into golf courses as an area that might lead to great exposure than in other regions.

Speaking of Mr. Laux's 400 birdhouses, Ms. VanBelle questioned the wisdom of luring birds to an area where toxic chemicals would deliberately be applied in an effort to eradicate some of the very food sources that the birds liked to feed on. She then spoke of the number of birds killed each year through pesticide use.

Ms. VanBelle had also noted the plans for 95 parking spaces for employee use. She wondered if they would be competing with other business looking for summer employees. Moreover, tax benefits to the Town of Edgartown were questionable because most of the 200 acres of the site would be placed under a conservation or a no-development restriction. Also, adding 644 trips per day on the Edgartown-West Tisbury Road and on Meeting House Road would have "a qualitative, detrimental impact." Ms. VanBelle finished by urging the Commission to vote no on this proposal. There was applause.

Suzanne Nickerson of Edgartown believed that the three existing golf courses were enough for the Island. "We are a small Island with a small population," she said, that the building of even one of the three proposed course would change the beauty of Martha's Vineyard. Many people, she said, felt that it was an either/or situation, that one course of the three proposed would definitely be built. She hoped that the Commission thought differently, she said. She saw the building of a golf course as thousands of trees being torn down and thousand of animals being killed. She urged the Commission to vote no on all three golf courses.

Being her husband, **Tom Sharkey of Edgartown**, was ill, Ms. Nickerson asked if she could read his letter. Mr. Donaroma indicated yes. Mr. Sharkey's letter referred to a February 25, 1999 editorial in *The Cape Cod Times* entitled "Getting Our Money's Worth." The piece concerned the controversy surrounding the Cape Cod's land bank's plan to buy land containing golf courses, land which, in effect, only golfers could enjoy. There was nothing irreplaceable about a golf course, the editorial continued, and towns should not spend precious money on fairways and greens. Mr. Sharkey's letter continued that golf courses were not what Cape Cod and the Islands were about. People went to those places for their unspoiled, natural beauty, not their golf courses. There was applause.

Last to speak was **Justin Aaron of Vineyard Haven**, who said he was opposed to the golf course "for all the reasons stated opposed to the golf course." He was also concerned that a decision for the proposal would set a precedent for other development decisions that would affect the environmental. There was applause.

Mr. Donaroma thanked all who had come and all who had given testimony, and he said that the Commission was going to do its homework. He would now close the Hearing, he said, but would leave the Public Record open for two weeks. The Hearing was adjourned at 12:06 a.m., Friday, March 12.

3 Certificates

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John MacKenty

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Jeremiah MacKenty

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Katherine M. and
Robert P. Bigelow,
Trustees