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GREAT GULL ISLAND 2010 – PART I

Helen Hays

Introduction

Excitement ran high as volunteers stepped from the new dock to the island April 23, 2010 to begin our 42nd season. The season, as it turned out, was unlike any we had experienced to date and included the following firsts: hottest summer on record; first real mid-summer water shortage; most synchronized peak hatch; least mortality of young for any season; twenty-two geolocators recovered (put on Common Terns in 2009); first use of umbrellas while moving between buildings as protection from the rain of droppings from well fed adult Common Terns; “Green” (the most aggressive female tern in the colony) introduced herself by attacking us continually (she also attacked every tern released from HQ (carpenter shop) during processing in June and the first half of July as these birds flew directly over her nest site); and three outstanding teenagers who helped during the season – Nehuen Bremer from Argentina, Georgia Male from the US and Ben Walker from England.

In beginning of this series of reports I thank many of the people who have worked on Great Gull Island over the years. I also want to thank all of you who have supported the project by responding to an appeal or doing the Great Gull Island Birdathon in the spring, and most recently, those of you who so generously contributed to the dock fund. Your support and participation has been critical in making it possible for us to work on Great Gull Island and to monitor what has become the largest colony of Roseate Terns in the western hemisphere and the largest nesting concentration of Common Terns in the world. This report will in be three parts, emailed at intervals in early 2011.

In this first section I want to mention a group of people who have returned to the island to work over spans of ten to forty-five years. They form the core of workers on Great Gull Island and have taken responsibility for different parts of our program. The time has gone very quickly. When we first started I don’t think any of us realized what our commitment would be. I do know, however, that the hard work, enthusiasm and success in tackling impossible tasks by members of this core group has made it possible to amass an excellent and unique data set – a data set, which has already given us insights into the biology of both Common and Roseate terns. Statistical analysis of this data in the future should help with the management and survival of both species in the northern and southern hemispheres. In the following paragraphs I list the first year each of the core group came to Great Gull Island in parentheses after their names. All of them returned in 2010 and I look forward to seeing them in 2011.

Melissa McClure (1990) and **Matthew Male (1976)** come early in the spring: Melissa rents a truck and drives people and gear from New York. In late April, Matthew, using our tractor, clears the meadow sections of the island to create habitat for nesting terns, in addition he repaired the old dock as needed prior to 2007 when the old dock washed away. **Jim Sorensen (1981)** and **Alex Holder (1999)** have come to Great Gull bringing groups of volunteers to help on spring and/or the fall work weekends. **Grace Cormons (1966)** has monitored Roseate Terns with teams of three to five people since 1988, **Joe DiCostanzo (1975)**, **Dick Young (1981)**, **Loretta Stillman (1982)** have monitored the Common Tern population each season with teams of 15-17 people. **Esteban Bremer (1996)** brings rangers and students working for the Fundación Vida Silvestre Argentina to work on Great Gull Island during the peak hatch in June, the busiest time on the Island. **Dale Dancis (1984)** has come to Great Gull Island in August, helping with weighing and measuring the young, picking up, packing and closing the island.

Melissa McClure has planted a variety of flowers, trees and bushes which, when in blossom, are extremely pretty and fun to follow. At first Melissa planted vegetables and flowers. Then dewberry moved into the garden and took it over. The flowers proved more successful and provide wonderful colorful accents in the spring before the intense work in the colony begins as well as later in the season, when we have time to enjoy them. Blossoming daffodils and forsythia welcome us when we arrive in April and later blooming poppies and iris are in flower before the first tern eggs hatch. Toward the end of the season the lilies bloom and attract Hummingbird Moths. Finally, a wealth of sunflowers at the back of the garden follows the sun throughout the day in late-August and early-September.



Toward the end of May one year, black tulips blossomed in a bayberry bush on the south side of the island – bulbs left by the army. When we reintroduced Meadow Voles they demolished the black tulips. The destruction of the black tulips was a definite loss, but the benefits from the voles far outweighed the loss. In the spring of 2010 black tulips again blossomed on Great Gull Island, as Melissa had planted them to surprise us.

Recently, Melissa has planted fruit trees (plums, pears and apples). The pears have been particularly successful. She has declared war on invasives. In 2010 she targeted pokeberry, working hard in the fall to rid the island of the many plants of this species which suddenly appeared at both the western and eastern ends of the island.

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In addition to gardening Melissa is also a gourmet cook. When she is on the island she treats everyone to excellent meals.



Matthew Male first came to Great Gull Island with his brother Michael when Michael made *Ternwatch*, a movie about the Great Gull Island Project. Matthew returned to the island on his own and between 1978 and 1984 he built thirty observation blinds, working early and late in the season, before and after the terns nested.

Between 1979 and 1984 Matthew led “off island” teams that visited nearby islands to trap and band adult and young terns. He took these teams to these other islands on a Boston

Whaler from Great Gull. Because there is no safe anchorage at the island, on returning to the island the whaler was pulled out of the water on a trailer of Matthew’s design and construction. He has been associated with projects on some of these islands ever since.



Each spring between 1992 and 2006 Matthew rebuilt the wooden connection on Great Gull Island between the dock and the island. In 2006, Captain Matt Poitras emailed me that unless the dock was rebuilt we would not have a season. That year, Matthew rebuilt the north end of the dock as well as the connection between the dock and the land. In the spring of 2007 the dock washed away completely. With help from many people, a magnificent new dock was ready for use in 2010.

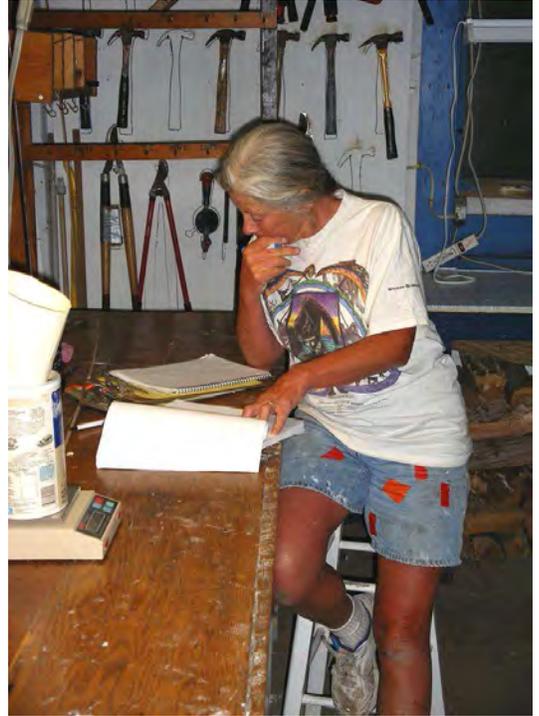
Each year since 1991, when we purchased a tractor with a grant from the Norcross Foundation, Matthew has disc-harrowed and raked the meadow sections of the island to make nesting room for terns. In addition, this year he scooped loads of gravel from the South Beach to form a base for a path from where the end of the new dock met the land to a road to HQ. He also worked with a friend, Rodney Maxwell, on Great Gull early in the spring of 2010 removing bittersweet from the Bunker and the ridge east of the Main Tower, using a chain, the tractor and brute strength.

Common Terns used these cleared areas in 2010. Keeping the meadow areas open has been critical in providing room for nesting Common Terns. In 2010 over 9,500 pairs of Common Terns nested and we banded over 11,000 young.



Grace Cormons worked in the Education Department at the American Museum of Natural History when she began going to Great Gull in 1966. During her first ten years on the island a single field team checked for both Roseate and Common Tern nests and chicks. Grace was particularly interested in Roseate Terns and published two papers on bill color change in Roseates. She was principal author or co-author on five other papers or notes before taking a break between 1975 and 1987 to raise a family.

In 1988 she returned to the island with her two sons, Tom and Peter. She and the boys checked the Roseate nesting areas, covering one end of the island one day and the other end the following day. "Roseate Check" is extremely strenuous as it involves working through the large boulders scattered around the edge of the island to find and mark the Roseate nests and to band the chicks. It is important to look carefully, do a thorough job, and also to move fairly quickly so as not to keep the birds up in any one area for long. Since 1988 Grace has worked, usually with three volunteers at a time, monitoring the Roseate Terns. In 2010 she was short of help and did all the nest marking and the first banding of chicks and trapping of adults by herself. Field assistants arrived the last week of June and helped her complete the season. Grace keeps herself in shape and is a karate black belt. Part of her exercise program includes swimming in her family's farm pond in Virginia until just before Christmas or until the ice on the pond is not breakable.



Joe DiCostanzo began attending Linnaean Society of New York meetings in the spring of 1973 when I was president of the Society. He was fairly regular in attendance and one day in 1974 I saw him working in the American Museum of Natural History on a survey they were doing. I thought to myself, if he has volunteered to pose questions for the survey, he might be interested in answering questions posed by some of our banding data. The first step was to systematically review the records of adults and young handled each year since 1966 when we first started working on Great Gull Island. There really were two sets of data, that gathered on weekends and during a week or two each summer 1966-1968 and that gathered from 1969 on when we started

the check of the island throughout the summer using the same method we use today. I told Joe the check might take a month. Two years later he finished it. His first summer on the island was in 1975.

Until the early 1980's, when we purchased a computer, Joe, with help from volunteers, entered each season's nest, adult and young data by hand on data cards. Once we obtained the computer, Joe wrote programs for the volunteers to use to enter the data. All data is checked three times, twice by the volunteers and once by Joe.

On Great Gull Island Joe computerizes records of all adults trapped in the colony after each trapping session. Before he does this, he organizes a game of “Bingo”. During the game he reads the name or number of the bird bag recorded for each bird trapped as the bird is processed. Bingo players answer by reading the nest number recorded on the field slip by the person trapping the nest. Joe then checks the nest number written in the field against what has been written on the banding room sheet. Once he computerizes the adult data after each trapping session, Joe creates a “pair list” of the nests that have had both members of the pair trapped. All trappers have “pair cards” and can cross off the numbers of nests that are paired so that no nest is trapped again once it is paired. Joe computerizes all the chick data as the data sheets for each hundred bands are completed and sends the records on all the newly banded birds to the U. S. Bird Banding Lab in Laurel, MD

Currently Joe is doing a final check of all young banded over the forty-two year period we have been working on Great Gull. This is a huge file of over 320,000 young. He is preparing to do a capture/recapture model analysis with this data, working with Robert Rockwell a statistician/biologist in the Ornithology Department at the Museum and a professor at the City University of New York. Joe has also started an analysis of the initial results of the Great Gull Island geolocator data, an exciting project which we hope to have submitted for publication before field work begins in May 2011.

Dick Young is from Naperville, Illinois, and first came to Great Gull in 1981. He has come every year since. He is an excellent chick checker and trapper. When we have to weed paths in overgrown areas as we check the island, Dick’s paths are always wide and clear. He runs “Bingo” when Joe leaves the island and is the grill master throughout the season, having fine-tuned cooking chicken on Friday night, hamburgers on Saturday night and hot dogs on Sunday nights. A few years ago Dick appeared on the television game show *Who Wants To Be A Millionaire*, winning \$50,000.

Dick found the first Gray Catbird nest on the island in 1982. Later, he began feeding the catbirds raisins. The HQ catbirds eat more raisins than we do! In 2009 Dick contributed a solar oven to the Project which proved very popular – it was used constantly that year by some high school and college students working on the island in July.



They enjoyed using the oven, but also felt it essential to have Dick present when putting their creations into or taking them out of the oven, leaving very little time for Dick to swim

One year students on the island emphasized exercise and were often in groups “doing stairs”, push ups, chinning themselves. During one of these more active sessions Dick walked in to the area where we wash dishes carrying two 5½ gallon jerry cans filled with water. As he put them down he said quietly: “You know, I find carrying water very good exercise.” Dick does his share of dishes and the



fact that he sees things that need to be done and does them, like remembering to treat our outdoor facilities once a month with Quickjohn, improves our quality of life considerably.

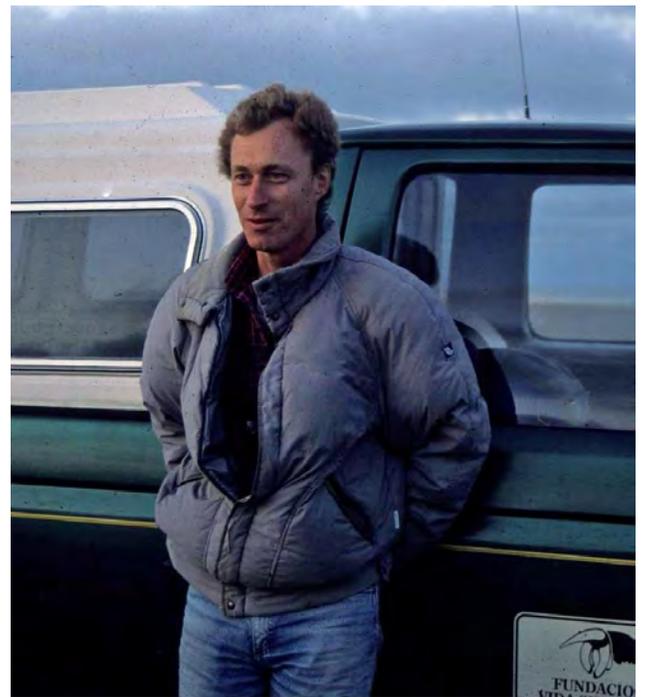


Loretta Stillman started coming to the island in 1982. She leads the western end check and is responsible for a very successful hat design, using artificial flowers to ward off terns. The terns when they attack us will hit the highest point so it is important to have something sticking out of your hat to protect the hat and ultimately the top of your head. Before Loretta began creating successful field hats we used sticks and sometimes dowels in the hats for protection from aggressive terns in the colony. Most sticks and dowels were too heavy to attach easily and the students would use yards of duck tape to get sticks to stand up in the hats. Loretta also traps with Dick Young. She is a whirlwind in the kitchen, producing meals in no time flat, even during peak hatch and they are all good. She sometimes adds grasshoppers and chocolate covered ants for accents. Loretta teaches at Hudson Valley Community College in the winter and has also been working in the Molecular Lab in the American Museum of Natural History's Ornithology Department on Great Gull Island projects.



Between 2000 and 2010 **Esteban Bremer** from the Fundación Vida Silvestre Argentina has brought rangers and students from Argentina to work on Great Gull Island during the peak hatch. They do chick check and trap at the western end of the island, where they put up a sign designating the area as "Little Argentina". The Argentinean teams all do an excellent job. They are all familiar with terns because they net with Esteban at Punta Rasa near San Clemente del Tuyú where there is a large roosting concentration of nonbreeding Common Terns from January to March.

If the peak hatch is a little later than anticipated, giving everyone some free time, the Argentineans always undertake a project. One year they built a small room on the island to enlarge the living quarters behind the central tower. The next year they added a deck. Another year they built a roof over the area where we do dishes and in another redid part of the ceiling in Paight where, more recently, they installed a shower in one of the smaller rooms. In 2009 they built and painted a new wash stand and repaired the floor in front of the kitchen door. Fernando Rubini made a large map of the island with place names which we have hanging in the computer room. In 2010 they completed the path between the dock and the road to HQ by tacking 2'x12's together. In addition Fernando and Pablo Rojas repainted a





“Keep Off” sign on the old cistern building by the dock, (the terns have ignored the sign), and mounted a “Keep Off” sign at the end of the new dock, while Esteban touched up the Little Argentina sign. The Argentines know how to fix everything and for a number of years were the only ones who were able to start our freezer.

In 2010 the Argentines trapped half the geolocator birds that we recovered – this was very exciting. They also trapped about 1,000 unbanded adult Common Terns at the

western end, an unusually large number of unbanded birds to trap on Great Gull in any summer. It is likely that since Cartwright Island, essentially a large sandbar and formerly the site of a tern colony located SW of Great Gull, was under water at high tide in 2010, some of the birds that previously nested at Cartwright came to Great Gull Island instead.

We are fortunate in having a cooperative study with the Fundación Vida Silvestre Argentina and we are very lucky to be able to work with Esteban Bremer who leads the groups. He consistently brings excellent, hard working teams from Argentina to study the colony with us.

Jim Sorensen first came to Great Gull Island in 1981 and has come almost every year since. He recruited his friends: Brian Simpson (1982), Cliff Benetsen (1982), John Avallone (1986) who later brought his wife, Sara – an able weeder, and Bob Kane (1990), whose wife Sue helped us put a new roof on HQ. Bob, Cliff, John and Sara still come to Great Gull and I am hoping this year we will see Brian as well. Jim and members of his crew have always worked hard and helped us with blind repair, roof repair, and brush clearing or whatever needed to be done on the island. One year Bob Kane built ten small blinds for observing the terns and he keeps an eye on the roofs, patching them whenever needed, so they do not leak. He has been wonderful about finding things we need for the island like inner tubes for some of the tires, one year a new door knob, repairing a latch of the door on Paight and bringing us tomato plants and pepper plants from Sue’s garden when she has extras. Cliff, Brian and Jim have often repaired blinds, putting in new floors and sometimes starting over and building and painting a new one.

In the late 1980’s, because of the increase in colony size, we desperately needed more traps. In 1988, 1989 and 1990 Jim offered to let us come to his house for trap making sessions. On one Saturday in February or March of each year we gathered at Jim’s to make traps, working either outside or in his basement, depending on the weather. John Avallone conceived an assembly line for putting the traps together, which made the work go relatively quickly. John also made some improvements in the trap design which made his traps very popular. Jim and Baerbel always invited us to stay over and Baerbel always gave us a fantastic lunch and a great dinner at the end of the trap making sessions. It was fun to get together before the season began and we were able to finish a good many traps. It was also



great to get together in a different venue, where we did not have to watch every step we took and where there were no terns diving at us.

Since Jim first started working on Great Gull Island he and his wife Baerbel have let us store things in their barn in Ledyard, CT. This has been wonderful for us, because we are able to take jerry cans, stoves, propane tanks as well as other bulky gear and leave them in the Sorensen's barn where they are safe for the winter. In many years Jim has taken our portable generators to be serviced and given them to us in the spring ready to run. Jim and Baerbel have made our trips to move on and off the island go very smoothly and easily.

Each spring between 1999 and 2006 Alex Holder has brought members of the Coastal Defense Study Group (CDSG) to Great Gull Island for the move out weekend in the spring. In 2003 our move out coincided with a meeting of the Group and Alex brought fifty people. It was the fastest unloading of any spring. The CDSG formed a line from the boat to HQ and unloaded in about ten minutes! Once they have unloaded they explore the structures of the fort, stay overnight and leave the next day. For the last four years they have not been able to come out as a group but Alex, on occasion has come to help. In three of these years, 2007, 2008 and 2009 we did not have a dock and in 2010 their annual meeting coincided the date we went to the island. I was very pleased when as a group as well as individually they contributed to the dock fund and we look forward to this spring when I hope many members of CDSG will try out the new dock.

[TO BE CONTINUED]

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**[EDITOR'S NOTE:** Members will have noticed that this issue of the *Linnaean News-Letter* is in a somewhat different format than the normal two column one. The reason for the change is explained below. Among the comments received from members who responded to last year's Society survey was that members wanted more news about the Great Gull Island Project. Over the years, the *News-Letter* has published many reports from Helen Hays about the Project, but it has been a few years since the last one. Over the winter the Project published Helen's report on the 2010 field season on Great Gull Island in *FOGGI* (*Friends of Great Gull Island*) an occasional newsletter published by the Project. The *Linnaean News-Letter* does not usually reprint material that has previously been published elsewhere. The only exceptions over the years have been articles reprinted from Linnaean Society publications that were originally published many years earlier that would be of interest to current members, but which would not otherwise be easily available to members.

In this case an exception to the not reprinting previously published material is being made because of the close relationship between the Society and the Great Gull Island Project and because many members will not have received *FOGGI*. This also brings us to the difference in layout for this issue of the *News-Letter*. Helen's report in *FOGGI* was so heavily illustrated that it was decided to not try to change it to conform to the *News-Letter's* normal two column layout, but rather to leave it as it was.]

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LINNAEAN NEWS-LETTER

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