

STONE LABORATORY 2001



PROGRAM REVIEW

Jeffrey M. Reutter, Ph.D, Director



STONE LABORATORY 200 I PROGRAM REVIEW

F.T. Stone Laboratory
School of Natural Resources
College of Food, Agricultural, and
Environmental Sciences
The Ohio State University



MAIN OFFICE

1314 Kinnear Road
Columbus, OH 43212-1194
614/292-8949
Fax: 614/292-4364

FIELD STATION

P.O. Box 119
Put-in-Bay, OH 43456
419/285-2341, 614/247-6500
Fax: 614/247-6578

STAFF

Jeffrey M. Reutter, Ph.D., *Director*.....*reutter.1@osu.edu*
Bonita Cordi, *Office Associate, Columbus*.....*cordi.2@osu.edu*
Kelly Dress, *Office Associate, Put-in-Bay Office*.....*dress.3@osu.edu*
Rosanne W. Fortner, Ph.D., *Associate Director*.....*fortner.2@osu.edu*
John R. Hageman, *Laboratory Manager*.....*hageman.2@osu.edu*
Arleen Pineda, *Program Coordinator*.....*pineda.2@osu.edu*
Karen T. Ricker, *Communications Coordinator*.....*ricker.15@osu.edu*
R. Chris Stanton, Ph.D., *Assistant to the Director*.....*stanton.36@osu.edu*
Matt Thomas, *Assistant Laboratory Manager*.....*thomas.347@osu.edu*

TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| EXECUTIVE SUMMARY | 1 |
| I. INTRODUCTION | 3 |
| VISION FOR THE FUTURE..... | 4 |
| MISSION | 4 |
| PROGRAM RELATIONS AND REPORTING STRUCTURE..... | 4 |
| II. OVERVIEW | 5 |
| EDUCATION | 5 |
| Courses for College Credit | 5 |
| Aquatic Science Field Trips, Workshops, and Conferences | 6 |
| RESEARCH..... | 6 |
| FRIENDS OF STONE LABORATORY | 6 |
| III. STONE LABORATORY HISTORY | 7 |
| IV. THE LABORATORY IN 2001 AND RECENT YEARS | 10 |
| PERSONNEL | 10 |
| OPERATIONAL CHANGES | 10 |
| Historical Location within the University | 10 |
| Relationship to Ohio Sea Grant College Program | 11 |
| CURRICULUM..... | 11 |
| Introductory Courses..... | 12 |
| Courses for Teachers..... | 13 |
| PROMOTION AND OUTREACH | 14 |
| GUEST LECTURES | 14 |
| WORKSHOP PROGRAM..... | 15 |
| SCHOLARSHIPS..... | 15 |
| ENROLLMENT | 15 |
| V. FINAL SUMMARY AND PLANS FOR THE NEAR FUTURE | 15 |
| PLANS FOR THE FUTURE | 16 |
| VI. MILESTONES IN THE HISTORY OF STONE LABORATORY..... | 18 |
| FIGURES | 30 |
| TABLES | 43 |

FRANZ THEODORE STONE LABORATORY

2001 PROGRAM REVIEW

Jeffrey M. Reutter, Ph.D., Director
Bonita Cordi, Office Associate, Columbus
Kelly Dress, Office Associate, Put-in-Bay
Rosanne W. Fortner, Ph.D., Associate Director
John R. Hageman, Laboratory Manager
Arleen N. Pineda, Program Coordinator
Karen T. Ricker, Communications Coordinator
R. Chris Stanton, Ph.D., Assistant to the Director
Matt Thomas, Assistant Laboratory Manager and Diving Safety Officer

June 2002

EXECUTIVE SUMMARY

Stone Laboratory, founded in 1895 and located on the 6.5-acre Gibraltar Island in the harbor at Put-in-Bay, Ohio, is Ohio's Lake Erie laboratory, the oldest freshwater biological field station in the country, and the island campus of The Ohio State University. The year 2001 was very productive at Stone Laboratory. Enrollment in the summer program in 2001 was 185 students (Figure 1). While the majority of our students come from Ohio State University, since 1990 our summer students have also come from 39 other Ohio colleges, 31 out-of-state colleges, and 292 high schools (Figures 2 and 3). Graduate enrollment in 2001 was the highest in the history of the Laboratory, whereas undergraduate and high school enrollment were both relatively low compared to the past few years (Figure 4). The number of credit hours taken surpassed 800 for the 11th consecutive year and we set a record for the number of graduate hours taken (Figure 5). Our efforts to enhance opportunities for women in science, initiated in 1989, continue to bear fruit as we now annually enroll more women than men, but our reduction in enrollment this year was primarily do to a reduced number of women when compared to recent years (Figure 6). Efforts to expand the number and diversity of course offerings have met with mixed success. In 2001, two new term courses and one new one-week course were scheduled and cancelled due to low enrollment, but two other new one-week courses, "Waterfowl Ecology" and "Stream Ecology for Teachers," were very successful, as was a new one-hour workshop, "Ichthyoplankton Identification." An experimental offering of one of the one-week courses for students in the Minority Research Initiative was very successful in 1998 and followed a successful offering for students from the Young Scholars Program in 1997. We enrolled two Young Scholars in 1999, but the program was unable to send any in 2000 due to funding difficulties. Four students from the Young Scholars Program enrolled in 2001 and 14 enrolled from the Columbus Public Schools I Know I Can program, making it our best year ever.

During the spring and fall, we offer a workshop/conference/tour program for students from grade 5 through adult. This program set new records for the number of groups and the total number of participants each year from 1997-2000 (Figures 7 and 8). Despite the events of 11 September 2001 and a very sluggish economy, 2001 was an excellent year producing the third highest number of

groups and participants—162 groups and 5,288 participants. The majority of these students were in the influential middle school years, but in 2001 we also set a record for the highest number of high school students participating in the program (Figure 9).

The demand for research space at the Laboratory remains very strong. The 77 scientists and students conducting research at the Laboratory in 2001 came from 15 different colleges and agencies and worked on 22 different research projects (Figure 10).

Last year was not a good year for scholarships at Stone Laboratory as the Oakland Park Conservation Club decided they would no longer offer scholarship support to students. They had contributed annually since 1956. The Friends of Stone Laboratory, through a strong effort to increase support, were able to cut this \$4,000 loss in half, but the amount awarded was still approximately \$1,800 less than in 1999, and the number of scholarships awarded, 32, was the lowest since 1992 (Figures 11 and 12). We are providing scholarships to less than 20% of the students attending Stone Laboratory and covering only about 25% of the cost for those students.

Since 1995, additions to our endowments through deferred gifts as part of the donor's estate total over \$3,000,000, and grew by about \$500,000 in 2001.

Our most significant accomplishments in 2001 were:

- 1) With the assistance of Senator Robert Latta and the State Legislature, the exterior renovation of Cooke Castle, including reconstruction of the two porches, was completed;
- 2) We hosted Ohio Sea Grant's First Leadership Institute for Newly Elected Officials in July and assisted State Representative Chris Redfern with his first Put-in-Bay Day for the Legislature the same month;
- 3) We celebrated the 80th birthday of Dr. Jane Forsyth an eminent Ohio geologist and frequent lecturer at Stone Laboratory, and mourned the loss to two early Lake Erie research scientists and Stone Laboratory faculty members: Dr. N. Wilson Britt and Dr. David Chandler;
- 4) In May we completed our move to newly renovated space in The Ohio State University Research Center. The cost of renovation, \$585,000 was provided by Ohio State University. The new space and facilities have greatly increased our productivity;
- 5) While Stone Laboratory is the oldest freshwater biological field station in the country and has served as Ohio's Lake Erie laboratory since 1895, until this year, we had never received federal funding to improve the Laboratory for the benefit of thousands of students and research scientists each year. Through the hard work and leadership of Senator Mike DeWine, Stone Laboratory received \$350,000 for equipment and facilities in the federal budget for the fiscal year beginning 1 October 2001;
- 6) The Stone Laboratory Brochure and Flier took first place in the brochures category during the publications competition at Sea Grant Week 2001; and,
- 7) 2001 was the 20th anniversary of the formation of the Friends of Stone Laboratory. The Friends are composed of former students and faculty and just "friends of Lake Erie" who banded together in 1981 to upgrade the Laboratory's facilities and equipment, raise money for scholarships, bring in more outstanding faculty members, make it easier for non-OSU students to attend the Laboratory, and, in general, improve the quality of the research, education, and outreach programs conducted at Stone Laboratory. Annually, the group of

about 500 members donates thousands dollars and person-hours to the Laboratory and Lake Erie. They have established 6 endowments and 4 general fund-raising accounts. In the last 10 years they have awarded 400 scholarships valued at approximately \$115,000 to students at colleges and universities all over Ohio, to help them attend Stone Laboratory. In 1996 the FOSL began awarding scholarships for outstanding science projects at the Ohio Academy of Science's State Science Day. To date, they have honored and awarded scholarships to 34 high school students from all over Ohio and they have purchased over \$100,000 of equipment to support research and courses at Stone Laboratory.

I. INTRODUCTION

Franz Theodore Stone Laboratory, Ohio's Lake Erie Laboratory, is the nation's oldest freshwater biological field station, and the Lake Erie and North Coast Campus of The Ohio State University. The Laboratory, originally called the "Lake Laboratory," was created in 1895 when The Ohio State University Board of Trustees appropriated \$350 to build a second floor on the state fish hatchery in Sandusky. In 1903 the Laboratory moved to a new building at Cedar Point, then to the second floor of the State Fish Hatchery at Put-in-Bay in 1918, and finally to its current location on the 6.5-acre Gibraltar Island with additional holdings on South Bass Island, in 1929. At that time the name was also changed to the Franz Theodore Stone Laboratory in honor of the donor's father.

Lake Erie is biologically the most productive of the Great Lakes, and the Laboratory is ideally located near the boundary of the Lake's western and central basins—"the most favorable location in Ohio, possibly even in the Great Lakes basin," according to Julius F. Stone, a Columbus businessman and a member of the University Board of Trustees, who in 1925 donated Gibraltar Island to The Ohio State University for teaching and research. Facilities at Stone Laboratory include a research building, a library, a 21-room laboratory/classroom building, a dining hall, five dormitory units, and the historic "Castle" residence (a National Historic Landmark constructed in 1865) of Philadelphia banker and Civil War financier, Jay Cooke.

Today, the Laboratory: provides a facility for year-round research (it has been called "the base for the research that saved Lake Erie"), develops and offers custom-designed aquatic science field trips and workshops for grades 5 through adult, offers college credit through a rigorous summer program of courses, and offers special conference facilities and speakers for groups interested in Lake Erie and the region's natural resources.

This report briefly reviews the past year, beginning with a program overview, followed by a discussion of the history of the Laboratory, and concludes with a more in depth discussion including "Milestones in the History of Stone Laboratory." The figures summarize the past 12-20 years, while the tables cover only 2001, adding to similar tables in reports produced in 2000, 1999, 1998, 1997 (covering the period 1995-97), and 1995 (covering the period 1988-94.)

VISION FOR THE FUTURE

Our vision is to be universally recognized as the premier freshwater education and research facility in the country. Our education and research programs will be unsurpassed. Our education programs will be models for science education in this country. The results of our research will be used to solve Lake Erie environmental problems and enhance the value of the Lake.

MISSION

The mission of the Franz Theodore Stone Laboratory is to serve The Ohio State University, the Ohio Sea Grant College Program, the State of Ohio, and the people of Ohio as their research, education, and outreach facility on Lake Erie. We must enhance the value of, and improve the management of, our marine and coastal resources through the education, research, and outreach programs conducted at the Laboratory. The Laboratory's programs should address the needs of, and create opportunities for, the following audiences: students in grades 5-12, college undergraduate and graduate students, K-12 teachers, research scientists, decision-makers and elected officials, technical staff in state and federal agencies, and the general public. Within this mission we have several goals:

- 1) Improve the quality of science education in Ohio by creating high-quality, hands-on science education opportunities for students in grade 5 through adults;
- 2) Create opportunities for undergraduate and graduate research training;
- 3) Create special educational opportunities for high school students and teachers;
- 4) Foster more informed decision-making through education and training programs for decision-makers and elected officials; and,
- 5) Encourage and support research on critical issues and problems facing Lake Erie, the Great Lakes, and the environment, providing the science behind more informed management decisions.

PROGRAM RELATIONSHIPS AND REPORTING STRUCTURE

Dr. Jeffrey M. Reutter is Director of the Lake Erie Programs at The Ohio State University: the Ohio Sea Grant College Program, F.T Stone Laboratory, CLEAR, and GLAERC. Stone Laboratory is part of the School of Natural Resources within the College of Food, Agricultural and Environmental Sciences. The Director of Stone Laboratory reports to the Vice President for Agricultural Administration, Dr. Bobby D. Moser. CLEAR is part of The Ohio State University Office of Research and the Director reports to the Vice President for Research, Dr. C. Bradley Moore. Structurally, the Ohio Sea Grant College Program is part of CLEAR, and GLAERC is part of Sea Grant, but operationally, Sea Grant has become the umbrella organization for the other three: Stone Laboratory, CLEAR, and GLAERC. This operational strategy takes advantage of Sea Grant's broader mission—research, education, and outreach. Stone Laboratory is the shared research facility for GLAERC and the base for many of Ohio Sea Grant's research, education, and outreach programs.

II. OVERVIEW

EDUCATION

Courses for College Credit. Stone Laboratory began offering regular courses for college credit in 1900. Each summer The Ohio State University offers 18-26 courses at Stone Laboratory. All courses take advantage of the Laboratory's unique location and capabilities and emphasize a hands-on approach to learning with a combination of lecture, laboratory, and field experience. Enrollment is limited to 12-20 students per course. The curriculum is rigorous with students in class from 8:00 a.m. to 4:00 p.m. six days per week.

Until 1990, the Laboratory offered courses only for upper level undergraduate and graduate students. In 1990, in an effort to join the drive to improve the quality of science and math education in Ohio and in this country, a program of introductory courses for college freshmen and sophomores was developed. This program is also open to superior high school students on a competitive basis, and allows them to gain college credit while still in high school. These new programs strive to make science exciting and to challenge the best young minds this country has to offer.

Special courses are also offered for teachers with the goal of improving the quality of science education in our schools. The initial courses for teachers—Marine and Aquatic Education, Great Lakes Education Workshop, and Global Change Education—were developed by faculty from the Ohio Sea Grant Education Program and use curriculum activities and reference materials developed with Sea Grant support as text. In addition to these instructional methods courses, science content courses for teachers introduce fundamentals of biological and earth systems topics where they can best be taught—in field settings.

Teaching at Stone Laboratory, while a great honor, is very different from teaching on the main campus and requires a great deal of expertise and energy—few courses on college campuses are taught for eight hours per day with the opportunity to blend lecture, laboratory, and field work. We search throughout the state, region, and country to get the best faculty to teach at the Laboratory. In addition to faculty from The Ohio State University, it would not be unusual in a given summer to find faculty members from institutions such as Bowling Green State University, Heidelberg College, Kent State University, Miami University, Otterbein College, Penn State University, Syracuse University, the University of Massachusetts, the University of Michigan, Wittenberg University, and the American Museum of Natural History in New York. Student evaluations consistently rank Stone Laboratory courses as being far superior to courses taken at their home institutions.

Enrollment and interest in Stone Laboratory increased significantly in the 1990s. During the 1980s average annual enrollment was approximately 57 students. From 1991-2001, average annual enrollment jumped to over 200 students--an increase of over 350 percent (Figure 1). Furthermore, from 1990-2001, students from 40 Ohio colleges and universities, 31 out-of-state colleges and universities, and 292 high schools participated in the Laboratory's courses (Figure 3).

Aquatic Science Field Trips, Workshops, Tours, and Conferences. During the spring and fall, we continue our efforts to enhance the quality of science education by offering custom-designed field trips and workshops for students from grade 5 to adult. These workshops range in duration from 1-3 days and generally include a science cruise on one of the Laboratory's research vessels, the *MV Bio-Lab* or the *MV Gibraltar III.* Students collect samples using fish trawls, bottom samplers, plankton nets, electronic probes, etc. and return with them to the Laboratory, where they are taught to use microscopes and analyze their samples and data. The Laboratory is also used as a conference facility for groups of up to 100. In the past 10 years participation in the workshop/conference/tour program has increased from approximately 1,850 to over 5,600 annually.

RESEARCH

Research is conducted 12 months per year at Stone Laboratory, and the Laboratory's students are involved with many of the projects. From 1995-97, 65 different research projects were conducted at Stone Laboratory by 53 investigators (the average investigator worked at the Laboratory for two of the three years), with 71 student assistants, representing 27 different universities and agencies (Figure 10). In 1998, 30 different research projects, with 29 principal investigators and 44 assistants, from 21 universities and agencies, were conducted at the Laboratory. In 1999, the number of projects dropped to 17, the number of institutions involved dropped to 13, and the number of principal investigators dropped to 21. However, the projects were larger and the number of graduate students and technicians working on the projects set a record at 55. In 2000, the number of projects increased to 23, the number of institutions increased to 14, the number on principal investigators increased to 24, and we set another record with 61 students and technicians working at the Laboratory. The year of 2001 was very similar in numbers to 2000, with 22 projects, 20 investigators, and 57 students and technicians from 15 institutions. In addition to coming from Ohio's colleges and universities, research scientists come from out-of-state institutions, state agencies, federal agencies, the private sector, city governments, and foreign countries.

Stone Laboratory is the shared research facility of the Great Lakes Aquatic Ecosystem Research Consortium (GLAERC), created in 1992 and composed of aquatic scientists at 12 Ohio colleges and universities: Bowling Green State University, Case Western Reserve University, Cleveland State University, Heidelberg College, John Carroll University, Kent State University, Miami University, Mount Union College, Ohio State University, Ohio University, the University of Toledo, and Wright State University. GLAERC enhances collaboration, cooperation, communication, and equipment and facility sharing to make Ohio's top scientists more competitive for federal funding and to allow them to better address the critical issues and problems affecting Lake Erie and Ohio's surface waters.

FRIENDS OF STONE LABORATORY

In 1981, a group of former Laboratory students, faculty, and individuals concerned with science

education and the Lake Erie ecosystem, formed the “Friends of Stone Laboratory.” The goal of the Friends is to enhance the programs at the Laboratory and allow students in the future to experience the same opportunities they had. Many former Stone Laboratory students have said the Laboratory provided the best learning experience of their academic careers. They frequently cite the value of the hands-on approach to learning and the corresponding increase in retention of the information. The words of Benjamin Franklin are frequently used to emphasize this point: “Tell me, I forget. Show me, I remember. Involve me, I understand.”

The Friends raise funds for scholarships, supplies and equipment, and they volunteer time and materials to keep the facilities in good repair. They created their first endowment in 1983 and have since created five more, and the total for all six endowments surpassed \$600,000 in July 2000. These endowments, with additional contributions from organizations, clubs, industries, and individuals, support dozens of student scholarships each year.

III. STONE LABORATORY HISTORY

Note: This section is modified from an article in the October 1994 issue of *Twine Line* by Maran Hilgendorf. Research for this article was conducted by Becky Vidra and Ohio State Archivist Bertha Ihnat. Information was obtained from various deeds, reports, and newspaper articles.

It was a time far different from our own. The commercial fishery on Lake Erie was still strong but would soon collapse. Automobiles were being perfected, and only a few roads in the largest of cities were paved. Only a few elite hotels had electric lights and toilets, and the motion picture industry was brand new. The x-ray was discovered, the typewriter and wireless telegraphy were just invented, and the botulism bacterium, *Clostridium botulinum* was isolated.

It was during this time—in 1894—that Professor David S. Kellicott, Chair of the Department of Zoology and Entomology, requested of then Ohio State University President Scott “the establishment in the near future of a lake laboratory at or near Sandusky and the creation of a State collection of fishes in Ohio ... to afford an opportunity and a stimulus to instructors and students of biology to spend their vacations investigating living problems in biology, especially such as are connected with important industries like the fisheries.”

On 2 September 1895, The Ohio State University Board of Trustees approved the project and appropriated the sum of \$350 for the construction of a second floor to the Sandusky Fish Hatchery Building. Kellicott and four graduate students conducted research during the next two summers until Kellicott's death.

Professor Herbert C. Osborn became chair and Laboratory director in 1899. Courses for credit were first offered in 1900, chiefly at the request of high school teachers who wished instruction in field biology. Fourteen students attended that year.

“A more adequate location for field work with more laboratory space” was soon desired, so Osborn obtained a 50-year lease from Cedar Point Resort and for \$3,387 erected a frame building that was dedicated 2 July 1903. The number of students attending classes increased to 22 and

research continued.

It soon became the policy that two members of the instructional staff were chosen from other institutions to “promote cooperation from the other colleges and universities and to attract students.” This practice continued from 1902 throughout the first 50 years.

State Fish Hatchery officials at Put-in-Bay donated the second floor of their hatchery building to the Lake Laboratory in 1913 because Cedar Point had become so large and popular that it was no longer a desirable site for the Laboratory. For the next several years, most of the 20 or so students who attended each year were men who were housed and had their meals in a nearby cottage. Because of the hostilities of the First World War, attendance declined to an all-time low of two students in 1918.

From 1917 to 1937 Professor Raymond C. Osburn was Laboratory director. In 1920 he became a member of the advisory board of the Ohio Fish and Game Division. With this appointment he was able to arrange subsidies to conduct a fisheries survey in Ohio from 1920 to 1923. During this time, enrollment had grown to the point that they were “bursting at the seams.”

On 6 July 1925, Julius F. Stone, a member of The Ohio State University Board of Trustees, presented Gibraltar Island to The Ohio State University as a permanent home for the “Lake Laboratory,” to be devoted to the purposes and uses of teaching and research. In deeding the island to the University, Stone located the Laboratory in “the most favorable location in Ohio, possibly even in the Great Lakes basin.”

In his letter to the Trustees, Stone stated that “with the enormous increase in population and with no indication of any diminution, it seems quite inevitable that human life will sooner or later press against the limit of subsistence, consequently every source of food supply must not only be conserved, but developed.”

The University's Board of Trustees resolved that the Laboratory should thereafter be known as the Franz Theodore Stone Laboratory in honor of the father of Julius F. Stone. On 22 June 1929, the University formally opened the new 21-room Laboratory Building. According to Osburn, moving to Gibraltar Island would “permit more than twice as many students to attend.”

In 1934, a committee appointed by Ohio State President Rightmire determined that the Laboratory should broaden its scope to include research and service in biology and human welfare. They also recommended that a full-time director and permanent staff should operate the Laboratory and that only graduate students be admitted for course work. This continued for nearly two decades, after which time the year-round program was discontinued because of such factors as logistical difficulties, limited facilities, years of economic depression, a second world war, and reduced state support and enrollment (only five students were enrolled in courses during the summer of 1955). Because of the enthusiasm and encouragement of former students, the Ohio State administration continued the summer course program under the direction of Professor Loren S. Putnam. For nearly three decades, approximately 18 courses were offered during two summer terms (5 weeks),

with a capacity of 60 students.

After the retirement of Osburn, succeeding directors included Dwight M. DeLong, (1936-1938), Thomas H. Langlois (1938-1955), Loren S. Putnam (1955-1973), Charles E. Herdendorf (1973-1987), and Jeffrey M. Reutter (1988 to present).

By the late 1940s, after 50 years of operation, then retired Professor Osburn noted that students from “nearly every state in the Union” as well as students from Argentina, South Africa, and India had attended Stone Laboratory. “I hesitate to say how many doctor's and especially master's degrees have been completed on the work begun or completed at Stone Lab, and around 200 research papers have been published in connection with the work done at this laboratory.”

In 1981, the Friends of Stone Laboratory was created to provide a way for former students to support the facility in its efforts to be not just the oldest, but the best, freshwater biological field station in the United States. This association raises awareness and funds for scholarships, research, and equipment.

In 1983, the University received \$1 million from the State Legislature for a sewage treatment plant, new housing for students and workshop participants; and for upgrading of the utility services, Dining Hall, and teaching laboratories. Construction of a 48-person, 12-unit housing facility was completed in 1986. During construction in 1985, Gibraltar House served as the Dining Hall. In 1989, the University received \$1 million dollars for erosion protection, new docks, a new water treatment plant on Gibraltar, and improvements in housing for faculty and research scientists. In 1997, the Laboratory received \$500,000 from the University to begin renovation of Jay Cooke's Castle. In 1998, the State Legislature added \$500,000 to complete the renovation of the building exterior that was accomplished in 2001.

Beginning in 1987, some courses were offered in either a 2.5-week or 5-week format. In 1990, introductory, one-week, courses were first offered to freshmen and sophomores and to superior high school students.

IV. THE LABORATORY IN 2001 AND RECENT YEARS

PERSONNEL

Dr. Jeffrey M. Reutter has been the Director of Stone Laboratory since 19 September 1988. Before that time he had served as Associate Director beginning in 1982, and as the Acting Director from 19 December 1984 to 31 December 1985 and from 1 November 1987 to 18 September 1988. John R. Hageman has been the Laboratory Manager at Put-in-Bay since 1 May 1987. Arleen Pineda has been the Program Coordinator in the Columbus Office since May 1996 and before that had been our Columbus office secretary dating back to March 1986. Dr. Rosanne Fortner has taught at the Laboratory since the mid-1980s and became our Associate Director on 1 June 2000. Dr. R. Christopher Stanton was the Assistant to the Director from August 2000 to August 2001 and began teaching at the Laboratory in 1999. Bonita Cordi has been the Office Associate and Receptionist in Columbus since October 1999. Karen Ricker was hired as our Communications Coordinator and the Assistant Director of Ohio Sea Grant in January 1998. Kelly Dress became the Office Associate at Put-in-Bay in April 1998. Matt Thomas became the Assistant Laboratory Manager at Put-in-Bay in June 1999 and the Diving Safety Officer for the Laboratory and the University in October 1999. Table 1 lists the Laboratory's administrative staff, teaching faculty, graduate teaching associates, research staff, student assistants, and office and technical staff for 2001.

OPERATIONAL CHANGES

A thorough internal and external review of the Stone Laboratory program was completed in 1988 and culminated with the signing of a "Plan of Action" for Stone Laboratory on 5 October 1988. Among other things, this "Plan" called for: (1) efforts to increase enrollment in credit courses taught at the Laboratory, (2) the institution of "a series of experimental calendars over the next few years with the eventual goal of a more flexible, innovative course calendar by 1991," and (3) the development of a teaching budget "sufficient to hire faculty for all courses scheduled for a given year."

Historical Location within the University. The Director reported to the Dean of the College of Biological Sciences until 30 June 1990. During this period the Director did not have a teaching budget for the Laboratory, and, therefore, had to rely on the goodwill of various department chairs to agree to offer courses at Stone Laboratory and pay the faculty. During 1989 and 1990, negotiations were completed that resulted in a transfer of reporting lines to the Office of Academic Affairs beginning 1 July 1990 and the creation of a teaching budget for the Laboratory under the control of the Director. This gave the Director greater flexibility in determining the courses to be offered and in selecting faculty. However, the offering departments still must approve the course offerings, the faculty members selected, and the teaching assistants (TAs). In some cases, the home department assigns the TA and provides part of the stipend. During the summer of 1990, half of the teaching budget came from the departments offering courses and half came from the Office of Academic Affairs. This budget was supported entirely by the Office of Academic Affairs from 1991 through 30 June 1994. The impact of these changes is readily apparent in Figure 1.

In an effort to reduce the number of units reporting to the Office of Academic Affairs, and as a result of university-wide restructuring, Stone Laboratory was moved to the College of Food,

Agricultural and Environmental Sciences beginning 1 July 1994. In this college the Laboratory is part of the School of Natural Resources and continues to have its own teaching budget, which is passed each year from the Office of Academic Affairs to the College of Food, Agricultural and Environmental Sciences.

Relationship to Ohio Sea Grant College Program. Dr. Jeffrey M. Reutter is the director of both the Ohio Sea Grant College Program and Stone Laboratory. This arrangement guarantees maximum cooperation and collaboration between the programs, guarantees that the State of Ohio will receive the maximum benefit from the programs, and eliminates any opportunity for duplication of effort.

The Ohio Sea Grant College Program at The Ohio State University is one of 30 Sea Grant programs in the National Sea Grant College Program, NOAA, U.S. Dept. of Commerce. Patterned after the Land Grant system, a Sea Grant program must be a partnership between academia, government, and the private sector. Ohio Sea Grant strives to improve education, the economy, and the environment using a combination of research, education, and outreach. Our primary goal is to enhance utilization, development, and wise management of Lake Erie, Ohio's most valuable natural resource, to enhance the quality of life for the people of Ohio. Ohio Sea Grant solicits research proposals from every college and university in the state and has supported projects at 12 Ohio universities. The program also supports an education program to enhance the skills of Ohio teachers, an extension program with 6 extension agents located along the shores of Lake Erie, and a communications staff intent on making science understandable to non-scientists. Every federal dollar must be matched by at least \$.50 from non-federal sources.

Within Ohio Sea Grant, Stone Laboratory is the facility used by many Sea Grant researchers and a major component in the Ohio Sea Grant Education Program. The Stone Laboratory Manager, John Hageman, has a 25% Ohio State University Extension appointment as a Sea Grant Agent for his support of outreach programs and the workshop/conference/tour program at the Laboratory. Through the Sea Grant Education Program, Sea Grant has supported development of new courses at Stone Laboratory. Sea Grant also assists in the dissemination of Stone Laboratory education and research materials, and in 1998 the Friends of Stone Laboratory newsletter was successfully incorporated into the Sea Grant newsletter, *Twine Line*, thus increasing the readership of both. It should also be noted that *Twine Line* was selected as the best newsletter in the country at Sea Grant Week in Oregon in 1999. Furthermore, in March 2001, the Stone Laboratory Brochure (including the poster and flier) was selected as the best brochure in the country.

CURRICULUM

Stone Laboratory offered 11-14 courses yearly from 1988-1994. During the summers of 1988 and 1989, the Laboratory offered a relatively traditional group of 13 courses each year. With one exception, these were all graduate and upper-level undergraduate courses. In 1988 there were two offerings specifically for teachers, but only one offering for teachers in 1989. We experimented considerably with the curriculum from 1988-1991 offering 17 upper-level, 5-hour courses. However, the curriculum was much more stable between 1992 and 1997 with a core of the same eight 5-hour courses offered each year. In 1998, we again offered eight upper level term courses, five introductory one-week courses, and four one-week courses for teachers. The one difference

from previous years was that Field Entomology was replaced due to low enrollment by a new course—Experimental Aquatic Ecology and Research. The 1999 curriculum was the same as 1998 with one exception, we offered a new one-week course for teachers—Ornithology for Teachers. New courses offered in 2000 included Biological Oceanography for Educators (a one-week course, EEOB 694), National Curricula for Water Education (a two credit hour course taught on three Sundays), and Marine and Aquatic Education: Tropical Studies (a 10-day course at a marine lab in Jamaica offered jointly with SUNY, Buffalo). New Courses offered in 2001 included Ichthyoplankton Identification Workshop (a one-day, one-hour course, EEOB 692), Waterfowl Ecology (a one-week course, Natural Resources 694), and Steam Ecology for Teachers (a one-week course offered at Old Woman Creek, EEOB 694). Three other new courses were attempted in 2001 but cancelled due to low enrollment: Natural History of Ohio (a term course, Natural Resources 510), Outdoor Recreation Behavior (a one-week course, Natural Resources 841), and Watershed, Estuarine and Coastal Ecology (a term course, Natural Resources and Civil Engineering 694). Currently about half of the faculty members come from Ohio State University and half come from other institutions.

Introductory Courses. In the late 1980s, several international reviews and evaluations ranked the quality of science and math education in this country, and the capabilities of our students in these subjects, very low—as low as 13th or 14th among the countries of the world. One of the problems is that science frequently is not taught in an exciting fashion or by qualified individuals within many of our schools. Stone Laboratory accepted this problem as a challenge. We felt it was up to us to do our part to improve this situation, for clearly science could be taught in an exciting fashion to all age groups at the Laboratory. However, in order to have a program that addressed science education at all levels, we had two gaps to fill—we needed to create courses for lower level undergraduates (freshmen and sophomores) and more opportunities for teachers.

Until 1990, Stone Laboratory had offered courses only for upper level undergraduate and graduate students. It seemed unfair that the Laboratory was not available to freshmen and sophomores as they were striving to determine majors and identify careers. It was also very common to receive calls from the parents of high school students inquiring about opportunities for their sons and daughters at the Laboratory. Unfortunately, with the exception of our spring and fall workshop/field trip program, there were no opportunities for these students at the Laboratory. This seemed to be a logical gap to fill if we were to achieve our goal of enhancing science education at all levels. Furthermore, if successful, courses for this audience could serve as a feeder system to our upper level courses, thereby increasing enrollment at that level also, and providing increased flexibility in the academic calendar as we worked for full enrollment.

With this in mind, Dr. Reutter developed a 3-hour, 1-week Introductory Aquatic Biology course (Zoology 125) in 1990. While preference was given to students already in college, the course was also advertised through the Concurrent Enrollment Program at Ohio State so that superior high school students could enroll and receive college credit while still in high school. Enrollment was so great that the course was offered twice and enough students were turned away to offer it two more times. In 1991 four offerings of the course were planned, but again demand necessitated that it be offered five times, and again many students were turned away. The course was also offered four or five times each summer from 1992-98. One of the five offerings in 1997 was limited to students from the Young Scholars Program at Ohio State, and one of the five offerings in 1998 was reserved for students in the Minority Research Initiative.

In 1991, Dr. Reutter encouraged Dr. David Horn in the Entomology Department to develop Introductory Insect Biology (Entomology 126). In 1992, Dr. Reutter contacted Dr. Larry Krissek in the Geology Department who developed an Introductory Oceanography course (Geology 107). This course has been so successful that it was offered twice each summer in 1993 and 1994 and once each year from 1995-01. Also, in 1992, Dr. Reutter worked with John Condit in the Zoology Department to change our 5-hour, upper level ornithology course (Zoology 624) to a 3-hour Introductory Ornithology course (Zoology 126). Consequently, from 1992-94, four introductory level courses were offered each summer, and in 1993 and 1994, due to multiple offerings of two of the courses, Stone Laboratory had a total of nine one-week introductory offerings. In 1996, Dr. Reutter worked with Dr. Robert Klips from the OSU Marion campus to develop an introductory course in Local Flora (Plant Biology 294). Consequently, from 1998-01, five one-week introductory courses were offered, and, due to multiple offerings of Introductory Aquatic Biology, the Laboratory again had a total of nine one-week introductory offerings.

Courses for Teachers. While it is very common for teachers to participate in all courses at Stone Laboratory, we have been working to develop more courses specifically for this important audience. Due to the multiplier effect, enhanced teacher training could have a greater impact on the quality of science education in this country than our new introductory courses.

Based on the success of his Introductory Oceanography course (Geology 107), in 1993 Dr. Krissek, developed a 3-hour, 1-week Oceanography course for teachers (Geology 584). As a result, we had three 1-week offerings specifically for teachers each year from 1993-95. Combining the teacher's courses with our introductory offerings resulted in 12, 1-week offerings in both 1993 and 1994.

In 1996, Dr. Krissek, with the assistance of Dr. William Ausich in Geology, offered a new course for teachers, "The Geological Setting of Lake Erie" (Geology 583). This one-week course was developed with assistance from the Lake Erie Protection Fund and the Ohio Sea Grant College Program and represented a new experiment for the Laboratory. The course, which has been very successful, begins at the Fawcett Center for Tomorrow on main campus on Saturday afternoon. The students go by van to Stone Laboratory, spend one night and visit Kelleys Island on Sunday, and then go to the mainland. Each day they work their way east along the Lake Erie shoreline visiting geological features and staying in motels. The trip culminates at Niagara Falls prior to driving back to Fawcett Center.

Also in 1996, Dr. Reutter worked with Dr. Carmen Trisler, Wittenberg University, and the Entomology Department to develop a new one-week course for teachers—"Insect Biology for Teachers" (Entomology 520). This course has been very popular and well reviewed by students and has been offered annually since 1996.

In late 1998 and early 1999, Dr. Reutter worked with John Condit from the Department of Evolution, Ecology and Organismal Biology to develop a new ornithology course for teachers. "Ornithology for Teachers" (EEOB 522) was offered successfully for the first time in 1999 and again in 2000 and 2001.

In late 1998 and early 1999, Dr. Reutter worked with US EPA's Great Lakes National Program Office to develop a one-week course for teachers taught entirely aboard the US EPA, 180-ft., research vessel, the *Lake Guardian*. The course was taught by Drs. Rosanne Fortner and David Culver and two scientists from US EPA. It was a huge success and will be repeated in 2002 and whenever we can get participation from EPA.

In 2000 and 2001 Dr. Reutter worked with Dr. Joseph Holomuzki from the OSU Mansfield Campus and the staff at the Old Woman Creek NERR to develop a one-week course for teachers, Stream Ecology for Teachers (EEOB 694), that was taught successfully in 2001.

PROMOTION AND OUTREACH

Enhancing and refining our promotion and outreach efforts has been a key to our success. Initially, to both reduce costs and increase awareness, we replaced the distribution of our large and expensive brochure with a less expensive flier and poster that could be distributed much more broadly. Arleen Pineda and Nancy Cruickshank with Ohio Sea Grant maintain our mailing lists (over 21,000 fliers are distributed annually) with assistance from the Ohio Academy of Science, the Ohio Board of Education, Ohio Biological Survey, the Science Education Council of Ohio, and others. In the early 1990's, other promotional activities were developed including: an annual Open House at Ohio State, special lectures by Dr. Reutter to pre-med majors and university college students in addition to special teachers' organizations, a GLAERC Colloquium at the Laboratory each summer, booths at the Ohio Academy of Science and State Science Day, and numerous other activities. In 1995, Dr. Reutter replaced the single, large Open House on main campus with 4-6 mini-Open Houses conducted at different locations and at different times during the winter and spring. He also initiated guest lectures about the Laboratory in a number of Zoology, Biology, and Natural Resources courses during the winter and spring, in addition to special presentations for UVC advisors.

In 1996, with the assistance of the Friends of Stone Laboratory, we began offering scholarships at the Ohio Academy of Science's State Science Day. In 1996, we reviewed the projects of 33 students and awarded three scholarships covering room and board for a 1-week introductory level course at the Laboratory. The winners have three years to use the award. In 1997, we increased the number of scholarships to six. We awarded seven in 1998 and six in 1999, 2000, and 2001. This has been a great opportunity to reward and recruit outstanding students and we have found that the majority of the students do indeed attend the Laboratory and use the scholarship.

GUEST LECTURES

In 2001, Stone Laboratory continued its traditional schedule of Thursday evening guest lectures (Table 3). With support from the Friends of Stone Laboratory and the Office of Housing, Food Service and Event Centers, these lecturers are encouraged to spend additional time at the Laboratory and participate in some of the classes.

WORKSHOP PROGRAM

Stone Laboratory's custom designed Aquatic Science spring and fall workshop and field trip program for grades 5 through adult continues to flourish, as do our efforts with educational tours and conferences. In 2000 we set records for the number of groups (174) and the number of participants (5,660), and in the six years from 1995-2000, we hosted 816 groups with a total of 27,707 participants, or an average of 136 groups and 4,618 participants per year (Figures 7-9). In 2001, we were on a record setting pace when the event of 9/11/01 derailed the program for a time. However, it was still one of our best years with 162 groups and 5,288 participants (Table 4).

SCHOLARSHIPS

In 2000, 57 Stone Laboratory students (new record) received scholarships valued at \$14,389 (Table 4). Twenty-seven of the scholarship recipients were high school students and 30 were college students. From 1996-2000, 225 students received a total of \$63,357 in scholarship support to attend Stone Laboratory (Figures 11 and 12). These numbers have been gradually increasing each year. During the previous five years, 1991-95, we awarded 156 scholarships totaling \$43,146. In 2001, we awarded 32 scholarships totaling \$13,005.

ENROLLMENT

During the 1980s enrollment at Stone Laboratory averaged 55-60 students per year. This jumped to 114 in 1990, 169 in 1991, 209 in 1992, 234 in 1993, and 221 in 1994, 181 in 1995, 195 in 1996, 209 in 1997, 214 in 1998, 222 in 1999, 201 in 2000, and 185 in 2001 (Figure 1 and Table 6). The 185 students that attended during the summer of 2001 came from 18 colleges and universities and 40 high schools (Figure 3).

V. FINAL SUMMARY AND PLANS FOR THE NEAR FUTURE

The development of our program of introductory courses and our new courses for educators, coupled with enhanced promotional efforts and a more targeted curriculum, has allowed enrollment at Stone Laboratory to almost quadruple since the 1980s (Figure 1). However, this growth has not come simply from an influx of high school students, as we have seen increases in the number of students of all types including students from Ohio colleges and universities, out-of-state colleges, and Ohio State University (Figures 2 and 3).

As mentioned many times in this report, the academic program at Stone Laboratory focuses on science education for all ages – grade 5 through adult. Furthermore, while the enrollment of high school students and undergraduates has experienced great increases, graduate student enrollment

in the 1990s is also much greater than in the 1980s and set a record in 2001 (Figure 4).

Equally important is the increase in the number of female students at the Laboratory. In 1988 we initiated special efforts to attract women to the sciences and to Stone Laboratory. In 1986, the ratio of men to women was 3:1. As this country works to increase the number of women in science, it is important to note that in every year since 1989, the number of women attending courses at the Laboratory has exceeded the number of men (Figure 6).

It is apparent that as the cost of a college education increases, fewer and fewer students are able to spend an entire summer at Stone Laboratory, and more students are enrolling for one course or one 5-week term. Nevertheless, the total number of credit hours taken at the Laboratory has still more than doubled since the 1980s (Figure 5).

PLANS FOR THE FUTURE

Renovation of Jay Cooke's Castle began in 1998 with the replacement of the roof, dome and windows. In 1999, the State Legislature, with leadership from Senator Robert Latta, appropriated \$500,000 to continue the renovation. Renovation of porches and stone work was completed in 2000. In 1999 we initiated a contract with an architectural firm to develop the plan for the renovation and reuse of the interior of the structure. This plan calls for the construction of 13 private rooms with bathrooms, a kitchen and dining room, a conference room capable of seating 30, several small meeting rooms, and air-conditioning throughout. Our ultimate goal is to use the Castle as an education and outreach/conference center for Stone Laboratory. We believe the Castle will attract influential groups that can help the Laboratory and the University with fund raising and enhance our ability to influence resource management decisions in the Great Lakes region.

In 1997 we replaced all of our computers with 23 donated 386 machines from the OSU Research Foundation. In 1998, ten of these machines were replaced with 486 machines, again from the Research Foundation. In 1999 we added four Pentium machines, and in 2000, with support from the OSU Office of Research, we added 14 new computers.

The *Gibraltar II* was decommissioned in 1997. Prior to the 1999 season, the Office of Physical Facilities replaced the engine and cabin on the *BioLab*. At the end of 1999 we took possession of the 1981, 42-foot *Explorer* from the Ohio Division of Wildlife to replace the *Gibraltar II*. The vessel cost \$45,000 and the Friends of Stone Laboratory contributed an additional \$15,000 to split the cost of an engine rebuild with the Office of Physical Facilities. This vessel has more than twice the work area of the *BioLab* and is about twice as fast. It should greatly increase the capabilities of the program.

Enhancing communication capabilities at the Laboratory has been a very high priority. In 1999, with assistance from UNITS, Housing and Food Service, Physical Facilities, and the Office of Research, a T1 line was installed at the Laboratory. A telephone and Internet connection was placed in each classroom, dormitory room, cottage, our main office, and the Research Building. This should allow us to do distance learning/teaching from Stone Laboratory to classrooms throughout the state, and to transmit research data anywhere in the world. This system was fully

operational when classes began in 2000.

In 2001, Senator Mike DeWine was successful in placing \$350,000 in the NOAA budget for Stone Laboratory. These funds will be awarded in 2002 and will be used to replace vans, microscopes, boats, and the construction of a new educational Kiosk and renovations in the Research Building. In recent years maintaining high enrollments during second term has been difficult due to the late end date—many teachers and college students from schools on the semester system have to return to school before our second term is completed. In 1997 we experimented successfully by reducing second term from 5 to 4.5 weeks. In 1998, we reduced both first and second terms to 4.5 weeks, which allowed us to conclude the entire summer program a week earlier. This was repeated in 1999, 2000, and 2001.

On 22 July 2000, Ohio Sea Grant and Stone Laboratory hosted their 12th State Legislature/Congressional Day on Lake Erie with over 160 participants. In 2001 we hosted our first Leadership Institute for Newly Elected Officials.

In September 2000 Stone Laboratory and Ohio Sea Grant hosted meetings of the Board of Directors of the Great Lakes Protection Fund and the Council of Great Lakes Research Managers of the International Joint Commission. We will continue to host groups of leaders and Great Lakes decision-makers and hope this program will grow when Cooke Castle is completed.

VI. MILESTONES IN THE HISTORY OF STONE LABORATORY

- 1895 Professor David S. Kellicott, Chairman of the Department of Zoology and Entomology, presents a proposal to the University to establish a field station for the study of biology at Lake Erie. The University approves the project, appropriating \$350 for the construction of a second floor on the State Fish Hatchery in Sandusky.
- 1896 Professor David S. Kellicott is named the first director of the Lake Laboratory and operates the Laboratory for special studies during the summer.
- 1899 Professor Herbert C. Osborn is named the second director upon the death of Professor Kellicott.
- 1900 The first courses are offered at the Lake Laboratory.
- 1903 The University obtains a 50-year lease for property on Sandusky Bay at Cedar Point, erects a frame building at a cost of \$3,376, and moves the Lake Laboratory to this new site.
- 1918 The Lake Laboratory moves to the upper story of the State Fish Hatchery at Put-in-Bay on South Bass Island; an adjacent lot is purchased by the University.
- 1925 Mr. Julius F. Stone, Chairman of the Board of Trustees, acquires Gibraltar Island in Put-in-Bay Harbor from the Jay Cooke family and presents it to the University. In accepting the gift, the University changes the name to Franz Theodore Stone Laboratory in honor of Mr. Stone's father.
- 1926 The Laboratory is moved to Gibraltar Island and utilizes the two buildings on the island, Cooke Castle (1865) and Barney Cottage (1907). A construction program, which includes a new laboratory building, dining hall and two housing units, Stone Cottage and Gibraltar House, is initiated in 1926 and completed in 1930.
- 1928 "Periodic oscillations in Lake Erie," by Dr. F.H. Kreeker, contribution number 1 of a new series of papers, is published by Stone Laboratory. Contributions 2 through 13 are published from 1929 to 1974.
- 1929 The Franz Theodore Stone Laboratory on Gibraltar Island is formally dedicated.
- 1934 President George W. Rightmire appoints an Advisory Committee to study the Laboratory and plan for future development. The committee recommends expansion of the Laboratory's activities into multi-disciplinary studies, year-round operation, and appointment of a full-time director.
- 1936 Professor Dwight M. DeLong is named the fourth director, the first to be appointed to a full-time position. Professor Thomas H. Langlois serves as assistant director from 1936 to 1938.

1938 Professor Thomas H. Langlois is named the fifth director upon the resignation of Professor DeLong.

The Franz Theodore Stone Laboratory is established as a regular department of the University, assigned to the President's Division. Full-time faculty positions for a fisheries biologist and a limnologist are approved; Drs. Charles F. Walker and David C. Chandler are appointed.

Peach Point Cottage is purchased by Mr. Julius F. Stone and donated to the Laboratory for use as faculty housing.

1939 Professor Milton B. Trautman joins the staff of the Laboratory.

1940 The Federal Fish Hatchery on Peach Point, South Bass Island, is transferred to the University. This facility includes the main hatchery building (converted to the principal research building of the Laboratory), superintendent's residence (converted to the Laboratory Office and Library) and a shop building.

Mr. Julius F. Stone donates a two-acre woodlot on Peach Point to the Laboratory.

1947 The Laboratory purchases a 37-foot steel research boat, the *Bio-Lab*.

1951 The Laboratory name is changed to the Franz Theodore Stone Institute of Hydrobiology.

1953 The Laboratory purchases a 30-foot passenger boat, the *Gibraltar II*.

1955 The Laboratory is renamed Franz Theodore Stone Laboratory, and becomes a program of the Natural Resources Institute, College of Agriculture and Home Economics. The year-round research program is suspended.

Professor Loren S. Putnam is named the sixth director upon the resignation of Professor Langlois.

1964 The bequest of Professor Mary D. Rogick permits the purchase of two faculty housing units, Sycamore Cottage and Rogick Cottage near Peach Point.

1966 The administration of Stone Laboratory is transferred to the new College of Biological Sciences.

The Jay Cooke Home (Cooke Castle) is designated a Registered National Historic Landmark by the U.S. Department of the Interior, National Park Service.

1967 The Hydrospheric Sciences Committee recommend establishment of a research center at Lake Erie.

- 1970 The Coast Guard Lighthouse on the south point of South Bass Island is transferred to the University and converted to a radiobiology laboratory and faculty housing unit.
- 1971 The Center for Lake Erie Area Research is established with facilities at Stone Laboratory.
- 1973 The summer instructional program is suspended and no regular courses are offered. Students attend in independent and group study courses.

The President's Task Force on Stone Laboratory recommends continuation of research and instruction at the Lake Erie field station.

Professor Charles E. Herdendorf is named the seventh director upon the retirement of Professor Putnam.

A lease agreement is negotiated with the U.S. Environmental Protection Agency for the 63-foot research vessel *Hydra* to be docked at Stone Laboratory.

- 1974 The summer instructional program and year-round research staff are reinstated at Stone Laboratory.
- 1977 A Sea Grant education project is funded with Dr. Victor Mayer as the principal investigator and Dr. Rosanne Fortner comes to Ohio State to work on the project.
- 1978 The Ohio Sea Grant Program is established with one research project to market underutilized fish species, one education project working partially at the Laboratory, and one extension agent, Fred Snyder, housed within the offices of the Ohio Division of Wildlife in Sandusky.
- 1980 The 50th Anniversary of Stone Laboratory on Gibraltar Island is celebrated.
- 1981 The first meeting of the Friends of Stone Laboratory, a group of alumni and friends of the Laboratory concerned with contributing to and preserving its high academic quality, takes place.
- 1982 The Ohio State University Board of Trustees holds a summer meeting at Stone Laboratory.
Ohio Sea Grant sponsors the first Congressional Day on Lake Erie.
The Ohio General Assembly provides \$950,000 for capital improvements at Stone Laboratory.
Dr. Jeffrey M. Reutter is named Associate Director.
- 1983 A Scholarship Endowment is established by the Friends of Stone Laboratory.
Ohio Sea Grant sponsors the second Congressional Day on Lake Erie.

1984 Sustaining and Visiting Professorship Endowments are established by the Friends of Stone Laboratory.

The Lake Erie Laboratory Visitors Center is created, with initial displays built by OSU Environmental Interpretation students led by Drs. Gary Mullins and Rosanne Fortner.

Ohio Sea Grant expands Congressional Day to include the State Legislature as Ohio Sea Grants State Legislature/Congressional Day on Lake Erie.

The first course for teachers (NR/EDST 614, Marine and Aquatic Education) is offered by Drs. Rosanne Fortner and Victor Mayer.

1985 Construction is initiated for the new Residence Hall, wastewater treatment plant, and renovations to the existing Stone Laboratory building and Dining Hall.

Dr. Jeffrey M. Reutter is named Acting Director from December 84 - December 85.

Research Vessel *Hydra* returns to operation after two years, with line item support from the Ohio Legislature.

Students from Miami University, Oxford, Ohio are allowed to register for Stone Lab courses by enrolling at Miami, serving as a prototype for all state universities.

1986 New residence hall, Harborview, open for student occupancy.

Governor Richard Celeste, at the request of Ohio Sea Grant, declares 1986 “The Year of the Lake” for Lake Erie.

1987 John R. Hageman is named Laboratory Manager.

Two-and-a-half week courses are offered for the first time.

Dr. Charles E. Herdendorf retires as Director.

Ohio Sea Grant conducts its fifth State Legislature/Congressional Day on Lake Erie ending with a picnic dinner at Stone Laboratory.

Dr. Jeffrey M. Reutter is named Acting Director.

1988 Dr. Jeffrey M. Reutter is named the Laboratory’s eighth Director.

The program begins utilizing the week before the beginning of first term for a one-week early offering for teachers, thereby expanding the original 10-week summer program to eleven weeks.

The Ohio State University is designated a “Sea Grant College” by the U.S. Secretary of Commerce.

Dr. David Garton’s class from Ohio State University records the first official record of a zebra mussel in Lake Erie on 15 October while on a field trip at Stone Laboratory.

Ohio Sea Grant funds Dr. Garton on the first research project on zebra mussels on 15 November.

1989 Ohio Sea Grant conducts its sixth State Legislature/Congressional Day on Lake Erie ending with a picnic dinner at Stone Laboratory.

1990 Stone Laboratory is transferred from the College of Biological Sciences to the Office of Academic Affairs.

The first introductory level course (Introductory Aquatic Biology, Zoology 125) is offered at Stone Laboratory. Superior high school students can enroll and receive college credit while still in high school. Demand is so great that the course is offered twice and many students are turned away.

Enrollment reaches 119, surpassing 100 for the first time.

Half of the Laboratory’s budget is provided by the Office of Academic Affairs thereby providing increased flexibility for the Director in developing an innovative new curriculum. The other half is still provided by the departments offering courses.

1991 Ohio Sea Grant conducts its seventh State Legislature/Congressional Day on Lake Erie ending with a picnic dinner at Stone Laboratory.

Stone Laboratory’s entire budget comes from the Office of Academic Affairs.

A second introductory course, Introductory Insect Biology (Entomology 126), is offered for the first time and demand for Introductory Aquatic Biology is so great that the course is offered five times.

Enrollment reaches 169, surpassing 150 for the first time.

Dr. Michael Ross, University of Massachusetts, is named the “Outstanding Visiting Professor.”

1992 New introductory courses in ornithology (Zoology 126) and oceanography (Geology 107) are offered for the first time. Introductory Aquatic Biology is offered five times.

Enrollment reaches 209, surpassing 200 for the first time.

Dr. Ken Krieger, Heidelberg College, is named the “Outstanding Visiting Professor.” The Great Lakes Aquatic Ecosystem Research Consortium (GLAERC) composed

of top aquatic scientists from Bowling Green State University, Case Western Reserve University, Heidelberg College, John Carroll University, Kent State University, Miami University, Mount Union College, Ohio State University, and the University of Toledo, is formed with Dr. Reutter as Director and Stone Laboratory as the shared research facility. In subsequent years Cleveland State University, Ohio University, and Wright State University joined the consortium.

1993 Enrollment reaches 234.

Ohio Sea Grant conducts its eighth State Legislature/Congressional Day on Lake Erie ending with a picnic dinner at Stone Laboratory.

Dr. David Moore, Utica College of Syracuse University is named the “Outstanding Visiting Professor.”

Erosion protection work is completed as is the new reverse osmosis water treatment system for the Laboratory’s water supply.

1994 Franz and Kate Stone visit the Laboratory with their grandson Franz T. Stone IV.

Dr. C. Lavett Smith, American Museum of Natural History, New York, is named the “Outstanding Visiting Professor.”

Reporting lines for the Laboratory change from the Office of Academic Affairs to the School of Natural Resources within the College of Food, Agricultural and Environmental Sciences.

1995 Ohio Sea Grant conducts its ninth State Legislature/Congressional Day on Lake Erie ending with a picnic dinner at Stone Laboratory which also serves as the official start of the Laboratory’s Centennial Celebration.

The Friends of Stone Laboratory, with assistance from the College of Food, Agricultural and Environmental Sciences, place a new flagpole on the island.

The Stone Laboratory Hall of Fame is created and Franz and Kate Stone are the first to be inducted.

The Oakland Park Conservation Club is inducted into the Hall of Fame.

Former Directors Loren “Puttie” Putnam and Charles E. Herdendorf, and former Associate Directors John L. Crites and Ronald L. Stuckey are given distinguished service awards.

The Geologic Setting of Lake Erie (Geology 583), a one-week course for teachers, is offered for the first time.

The workshop program sets records with over 80 groups and over 3,000 participants.

Bobby D. Moser, Vice President and Dean of the College of Food, Agricultural and Environmental Sciences receives the first Superior Leadership Award.

Dr. Carmen Trisler, Wittenberg University, receives the “Outstanding Visiting Professor Award.”

Stone Laboratory receives the first “Lake Erie Award” from the Ohio Lake Erie Commission in recognition of the Laboratory’s many contributions to education, research and the improvement of the Lake Erie ecosystem.

1996 Waldock Gazebo and Lakeview Pavilion are built on Gibraltar Island using donations from Jack Waldock, longtime supporter of Ohio Sea Grant and Chair of the Northwest Ohio Sea Grant Advisory Committee.

The Centennial Celebration concludes with a program and gala during which time Jack Waldock and Bobby Moser place capsules into the base of Waldock Gazebo.

We receive resolutions and proclamations honoring the Laboratory from the Governor, Congress, the Ohio House of Representatives, the Ohio Senate, and the Ohio Board of Regents.

The workshop program sets new records for number of groups (100) and participants.

Former Directors Loren “Puttie” Putnam and Charles E. Herdendorf are inducted into the Hall of Fame.

Former Associate Director Walter E. Carey, and retiring Maintenance Supervisor, Timothy P. Luecke, receive Distinguished Service Awards.

Dr. Carmen Trisler, Wittenberg University, receives the “Outstanding Visiting Professor Award” for the second time.

1997 Ohio Sea Grant celebrates its 20th anniversary with its 10th State Legislature/Congressional Day on Lake Erie. It is also the 15-year anniversary of Ohio Sea Grant’s first Congressional Day on Lake Erie in 1982.

New exterior lighting is placed on Gibraltar Island and new blackboards are placed in all of the classrooms.

The Gibraltar II is permanently taken out of service due to hull problems caused by age.

Introduction to Local Flora (Plant Biology 294) is offered for the first time.

The Ohio State University Young Scholars Program sends up an entire class of students for

an offering of Introductory Aquatic Biology.

The workshop program sets records for the number of groups and participants for the third year in a row.

The Laboratory sets a record for the number of graduate students—71.

A remotely operated vehicle (ROV) is purchased for the Laboratory by the Office of Research and Ohio Sea Grant.

Dr. David W. Garton is hired as the Associate Director.

1998 Construction is initiated and completed to replace the roof, remove the dome, and repair the windows on Jay Cooke's Castle.

The Ohio State University Minority Research Initiative sends a class for Introductory Aquatic Biology.

The Library is moved from the main office in Bayview on South Bass Island to the third floor of Stone Laboratory on Gibraltar Island, by volunteers from the Friends of Stone Laboratory.

The Laboratory and the Friends of Stone Laboratory sets records for the number of scholarships awarded (43) and the total value of the scholarships (\$13,632).

Melissa Haltuch is hired as the 1st ROV operator.

The workshop, tour, and conference program sets records for the number of groups (151) and the number of participants (5,246) surpassing the previous records by 40 groups and over 1200 participants.

The FOSL kick-off the State's Coastweeks Program with tours and programs on Gibraltar Island and the Put-in-Bay Lighthouse. Approximately 1000 people participate.

The Cooke family holds their first reunion on Gibraltar Island with approximately 100 guests. Jim and Ann Harding are the organizers.

Former professor and Associate Director, John L. Crites, donates prints and water colors of Laboratory buildings which are numbered and used as a fund raiser to support research opportunities for students.

Dr. Ann M. Stoeckmann, Pennsylvania State University, is selected as the Outstanding Visiting Professor.

1999 The Laboratory and the Friends of Stone Laboratory sets records for the number of scholarships awarded (49) and the total value of the scholarships (\$14,860).

Matt Thomas is hired as the first Assistant Laboratory Manager and the University's Diving Safety Officer.

Dr. Rosanne W. Fortner is hired as the Associate Director.

On 2 July, the University Board of Trustees meets at the Laboratory for the first time in 17 years.

On 9 July, Ohio Sea Grant and Stone Laboratory host the 11th State Legislature/Congressional Day on Lake Erie.

New carpeting and air conditioning/heat installed in Lecture Hall.

Ornithology for Teachers is offered for the first time.

Collaboration between Stone Laboratory, Ohio Sea Grant, US EPA, and the EPA Great Lakes National Program Office bring about the offering of a new 1-week course for teachers aboard EPA's 180-ft research vessel, the *Lake Guardian*.

The total value of the 6 endowments of the Friends of Stone Laboratory surpasses \$500,000.

Enrollment in summer courses reaches 222—the second highest total in history. A total of 125 OSU students enroll—the highest number in history.

During the 1990's, students from 40 Ohio colleges, 31 out-of-state colleges, and 260 high schools take courses at Stone Laboratory.

The workshop, tour, and conference program sets records for the number of groups (173) and the number of participants (5,566).

Dr. David L. Moore, Utica College of Syracuse University, is selected as the "Outstanding Visiting Professor."

2000 The Laboratory and the Friends of Stone Laboratory sets records for the number of scholarships awarded—57.

On 22 July, Ohio Sea Grant and Stone Laboratory host the 12th State Legislature/Congressional Day on Lake Erie.

The workshop, tour, and conference program sets records for the number of groups (174) and the number of participants (5,660).

Dr. R. Chris Stanton is hired as the Assistant to the Director, a newly-created post-doctoral position.

A plan for the renovation of the Castle is developed and approved. The porches are replaced, drainage is repaired, and masonry joints are repointed completing the exterior renovation.

With the assistance of the Friends of Stone Laboratory, the Ohio Division of Wildlife, and the Office of Physical Facilities, we purchase and renovate a research vessel from the Division of Wildlife—the 42-foot, *Explorer*, which is renamed the *Gibraltar III* when the repairs are completed and the vessel is documented.

The Ohio Sea Grant College Program receives the 2000 Lake Erie Award from the Lake Erie Commission.

The first comprehensive strategic plan for the entire program, Ohio Sea Grant, Stone Laboratory, CLEAR (Center for Lake Erie Area Research), and GLAERC (Great Lakes Aquatic Ecosystem Research Consortium) is completed and built around the strategic plan for the National Sea Grant College Program and the Academic Plan for The Ohio State University.

The entire program goes through an extensive review by a Program Assessment Team from the National Sea Grant College Program and receives the highest possible rating: Excellent.

A monitoring instrument is deployed off the north side of Gibraltar Island, beginning the Lake Erie Monitoring Network (LEMNet).

With the assistance of UNITS, Physical Facilities, Housing and Food Service, the University Office of Research, and the FOSL, Stone Laboratory gets a T1 line for telephone and Internet communication. Telephones and Internet connections in all rooms allow 5-digit dialing to main campus and research data transmission worldwide.

The Office of Research at Ohio State donates \$50,000 to purchase equipment including: 14 new computers, a laptop computer and LCD projector, an electro-shocker, two hand-held GPS units, a GPS unit for the *Gibraltar III*, a water quality data recorder for our monitoring program, two new trawls, and more.

Housing and Food Service donates chairs for the Lecture Hall. The FOSL clean and transport them to the Laboratory.

Physical Facilities donates 39 new trees and shrubs. The FOSL plant them on Gibraltar Island.

The Council of Great Lakes Research Managers of the International Joint Commission meets at Stone Laboratory for the first time.

Dr. Michael Hoggarth, Otterbein College, is named “Outstanding Visiting Professor.”

2001 In May the main office on campus moves to newly renovated space in The Ohio State University Research Center. The cost of renovation, \$585,000 was provided by Ohio State University.

In June 2001 Ohio Sea Grant and Stone Laboratory host the first Lake Erie Leadership Institute for Newly Elected Officials. Ten offices are represented.

In July 2001, Ohio Sea Grant and Stone Laboratory host a special Put-in-Bay Legislative Day developed by State Representative Chris Redfern with the village of Put-in-Bay and a number of other sponsors. Over 45 State Representatives and Senators attended.

While Stone Laboratory is the oldest freshwater biological field station in the country and has served as Ohio's Lake Erie laboratory since 1895, until this year, it had never received federal funding to improve the Laboratory for the benefit of thousands of students and research scientists each year. Through the hard work and leadership of Senator Mike DeWine, Stone Laboratory receives \$350,000 for equipment and facilities.

Friends of Stone Laboratory celebrate their 20th anniversary. The Friends are composed of former students and faculty and just "friends of Lake Erie" who banded together in 1981 to upgrade the Laboratory's facilities and equipment, raise money for scholarships, bring in more outstanding faculty members, make it easier for non-OSU students to attend the Laboratory, and, in general, improve the quality of the research, education, and outreach programs conducted at Stone Laboratory. Annually, the group of about 500 members donates thousands dollars and person-hours to the Laboratory and Lake Erie. They have established 6 endowments and 4 general fund-raising accounts valued at more than \$600,000. In the last 10 years they have awarded 400 scholarships valued at approximately \$115,000 to students at colleges and universities all over Ohio, to help them attend Stone Laboratory. In 1996 the FOSL began awarding scholarships for outstanding science projects at the Ohio Academy of Science's State Science Day. To date, they have honored and awarded scholarships to 34 high school students from all over Ohio and they have purchased over \$100,000 of equipment to support research and courses at Stone Laboratory.

The Stone Laboratory Brochure and Flier took first place in the brochures category during the publications competition at Sea Grant Week 2001.

Dr. Michael A. Hoggarth, Otterbein College, and Dr. David L. Moore, Utica College of Syracuse University, share the "Outstanding Visiting Professor Award."

FIGURE 1

**Total Student Enrollment at Stone Laboratory
1980-2001**

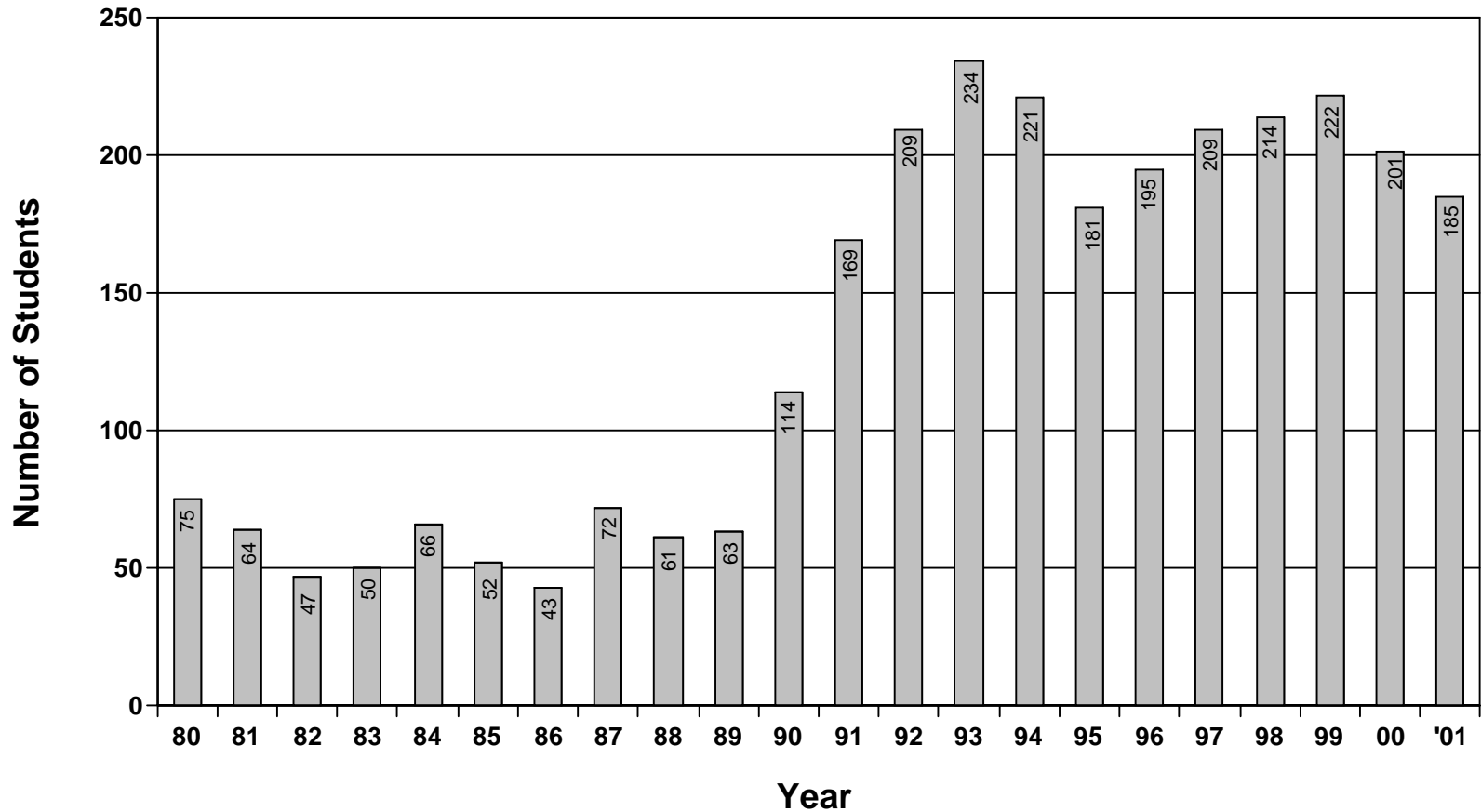
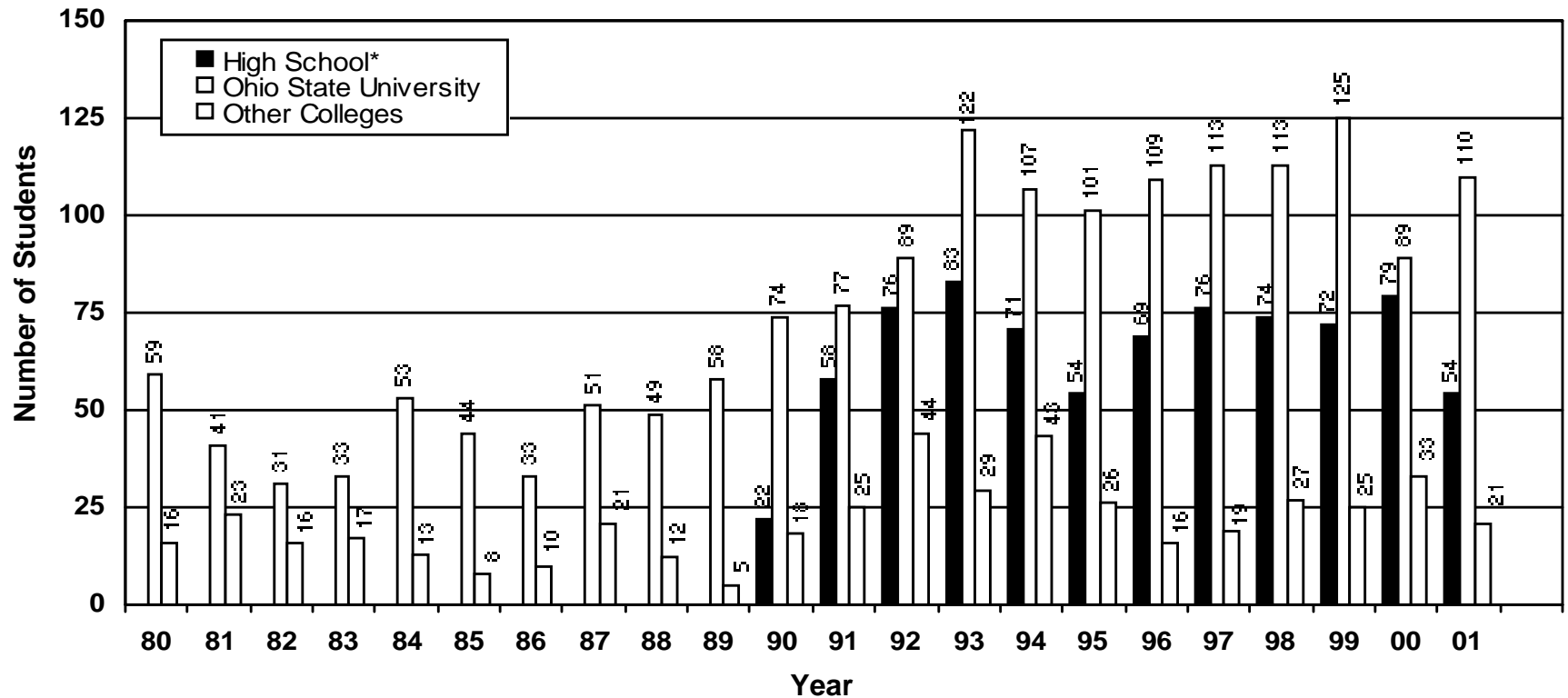


FIGURE 2

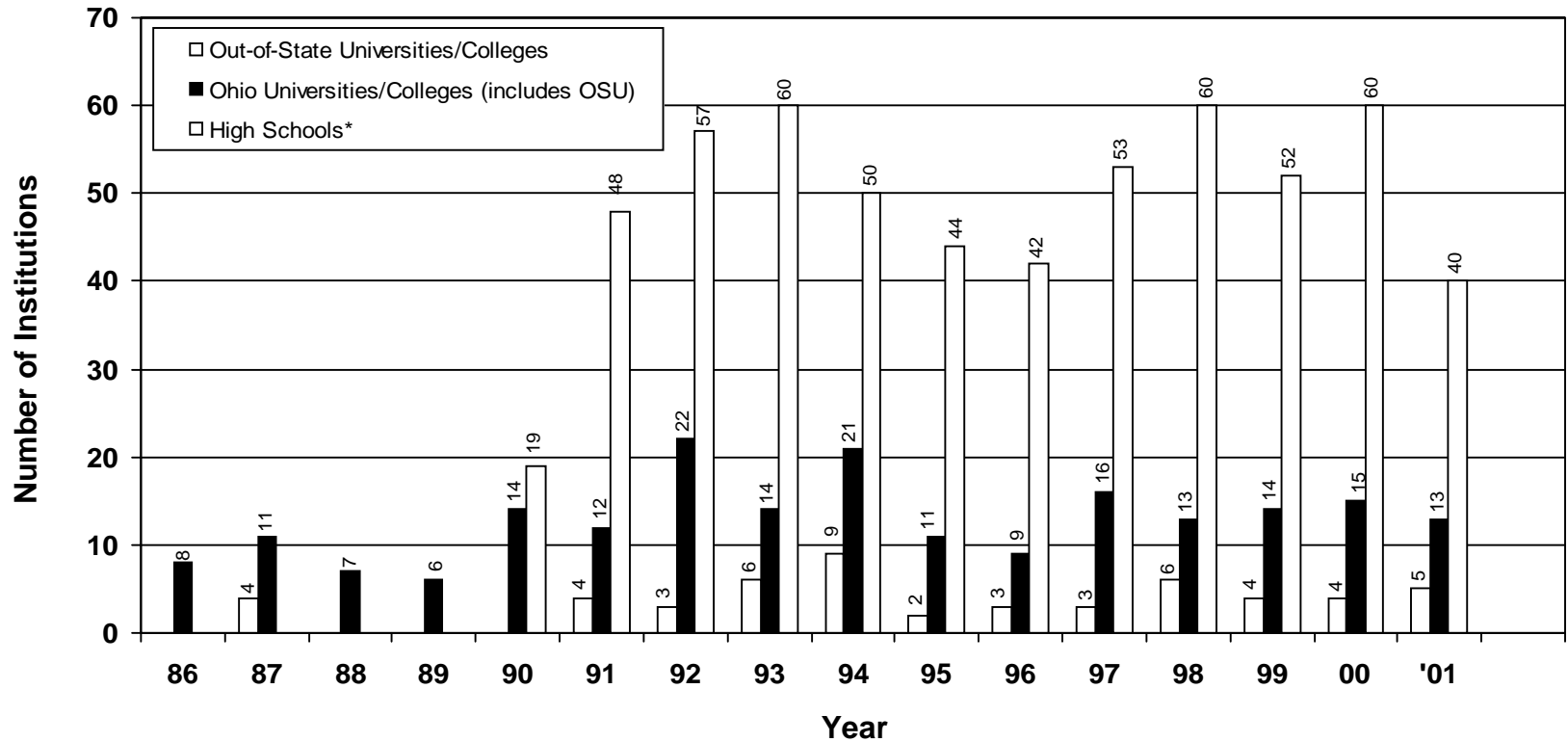
Number of Students Attending Stone Laboratory from High Schools, Ohio State University, and Other Colleges 1980-2001



*Introductory courses for high school students began in the summer of 1990. These students enroll through Ohio State and receive undergraduate credit.

FIGURE 3

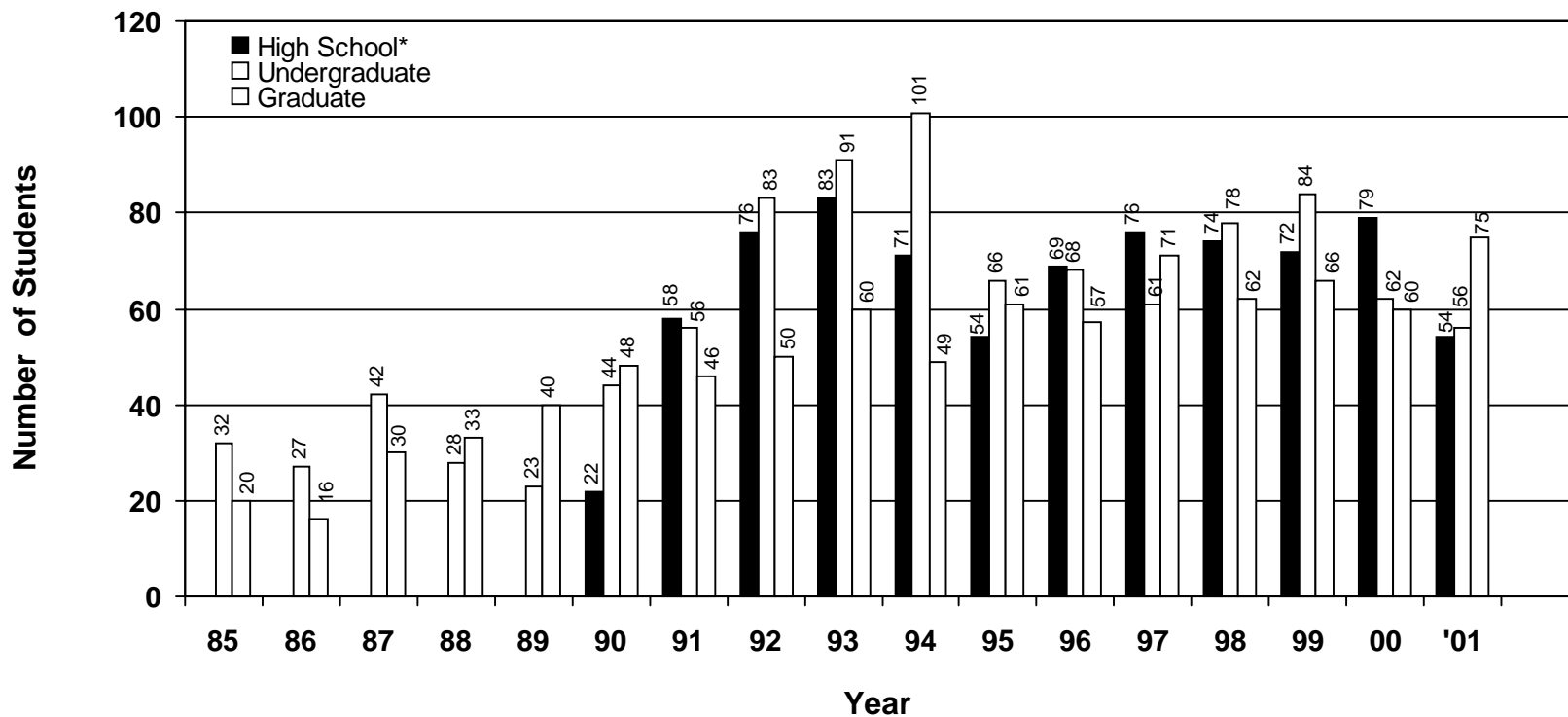
Number of Institutions Represented by Students at Stone Laboratory 1986-2001



*Introductory courses for high school students began in the summer of 1990. These students enroll through Ohio State and receive undergraduate credit.

FIGURE 4

Number of Undergraduate, Graduate and High School Students Attending Stone Laboratory 1985-2001



*Introductory courses for high school students began in the summer of 1990. These students enroll through Ohio State and receive undergraduate credit.

FIGURE 5

**Credit Hours of Student Enrollment at Stone Laboratory
1987-2001**

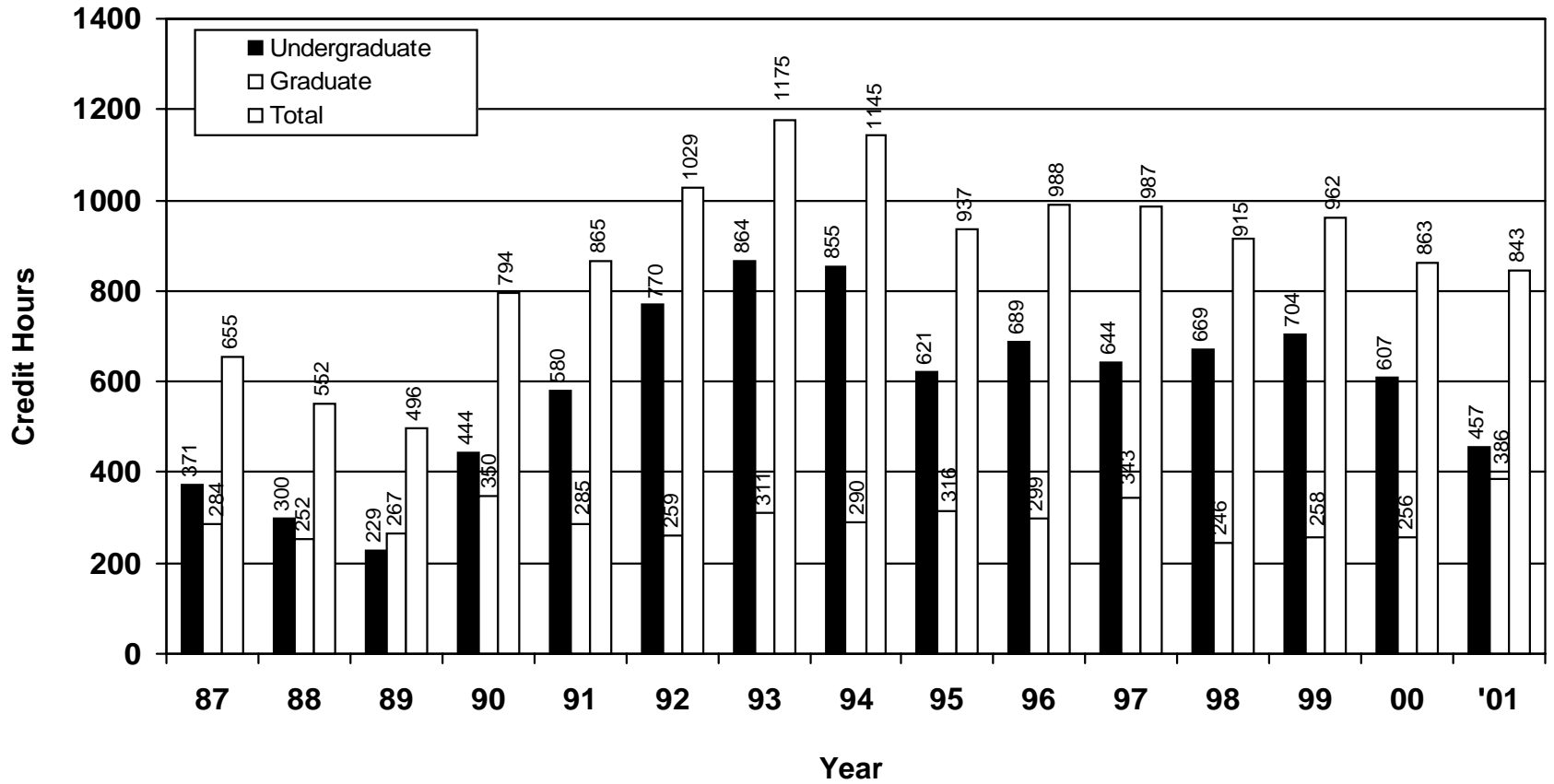


FIGURE 6

**Number of Male and Female Students Attending Stone Laboratory
1986-2001**

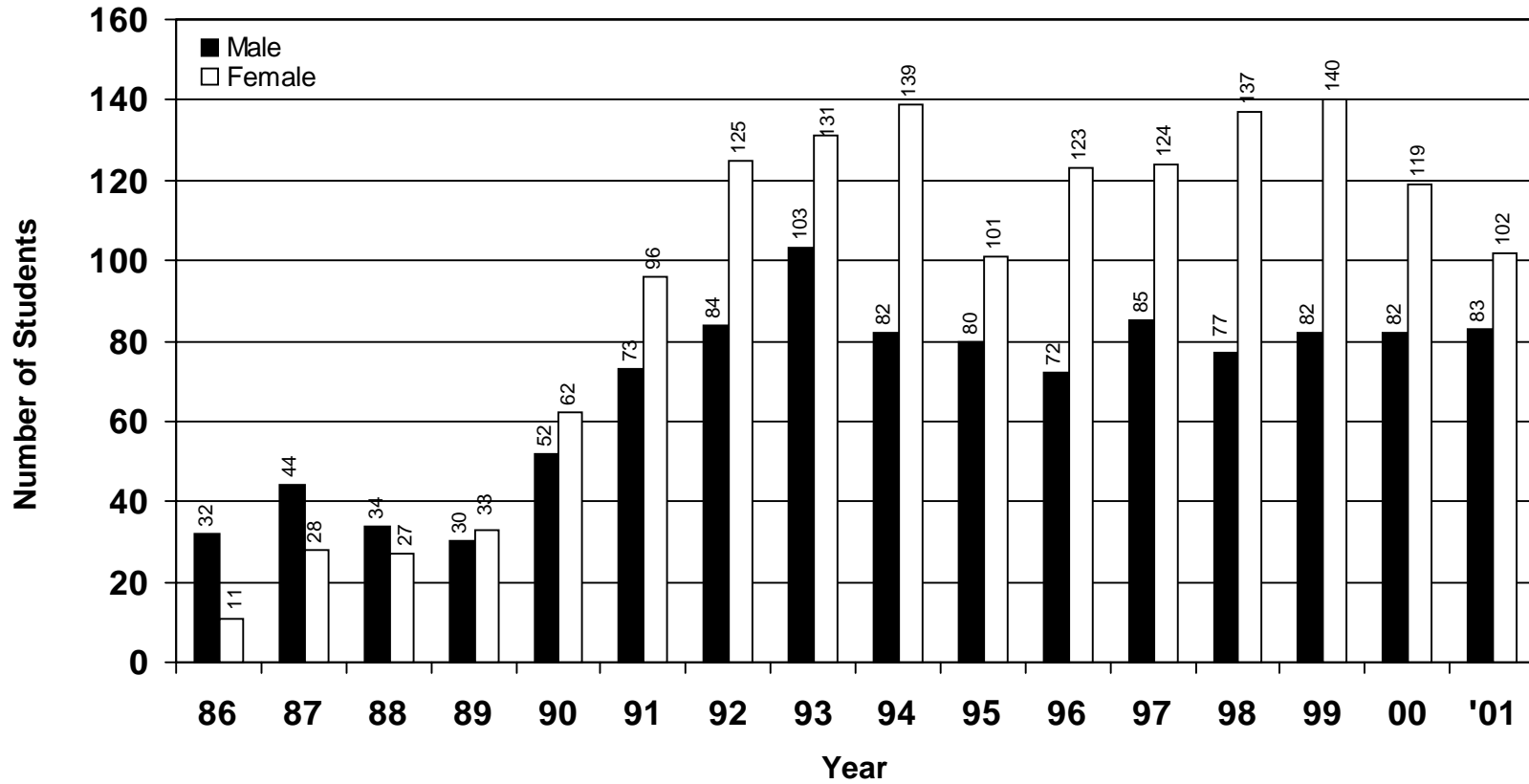


FIGURE 7

Stone Laboratory Workshops, Conferences, and Tours: Number of Groups 1991-2001

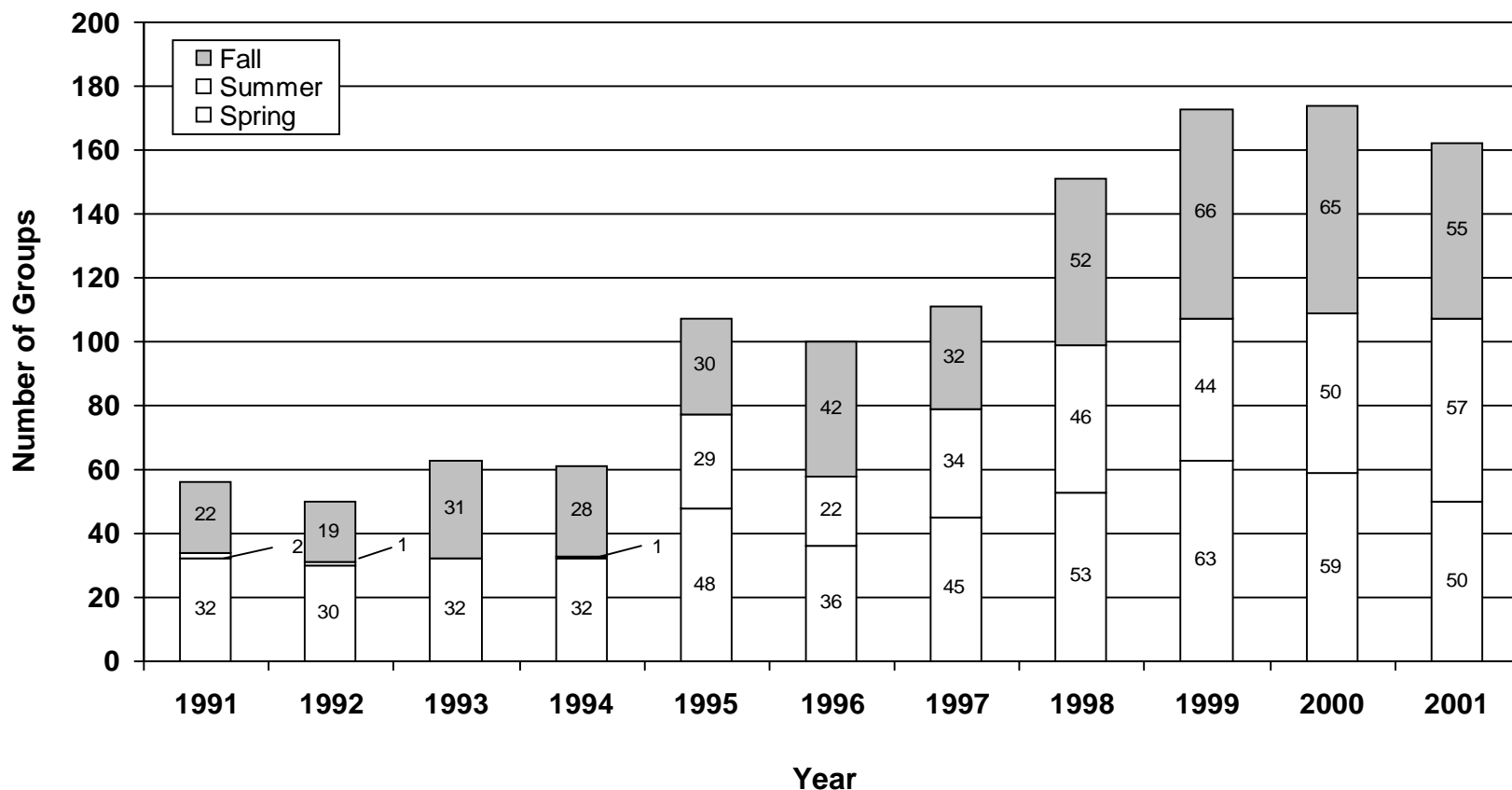


FIGURE 8

**Stone Laboratory Workshops, Conferences, and Tours:
Number of Participants
1991-2001**

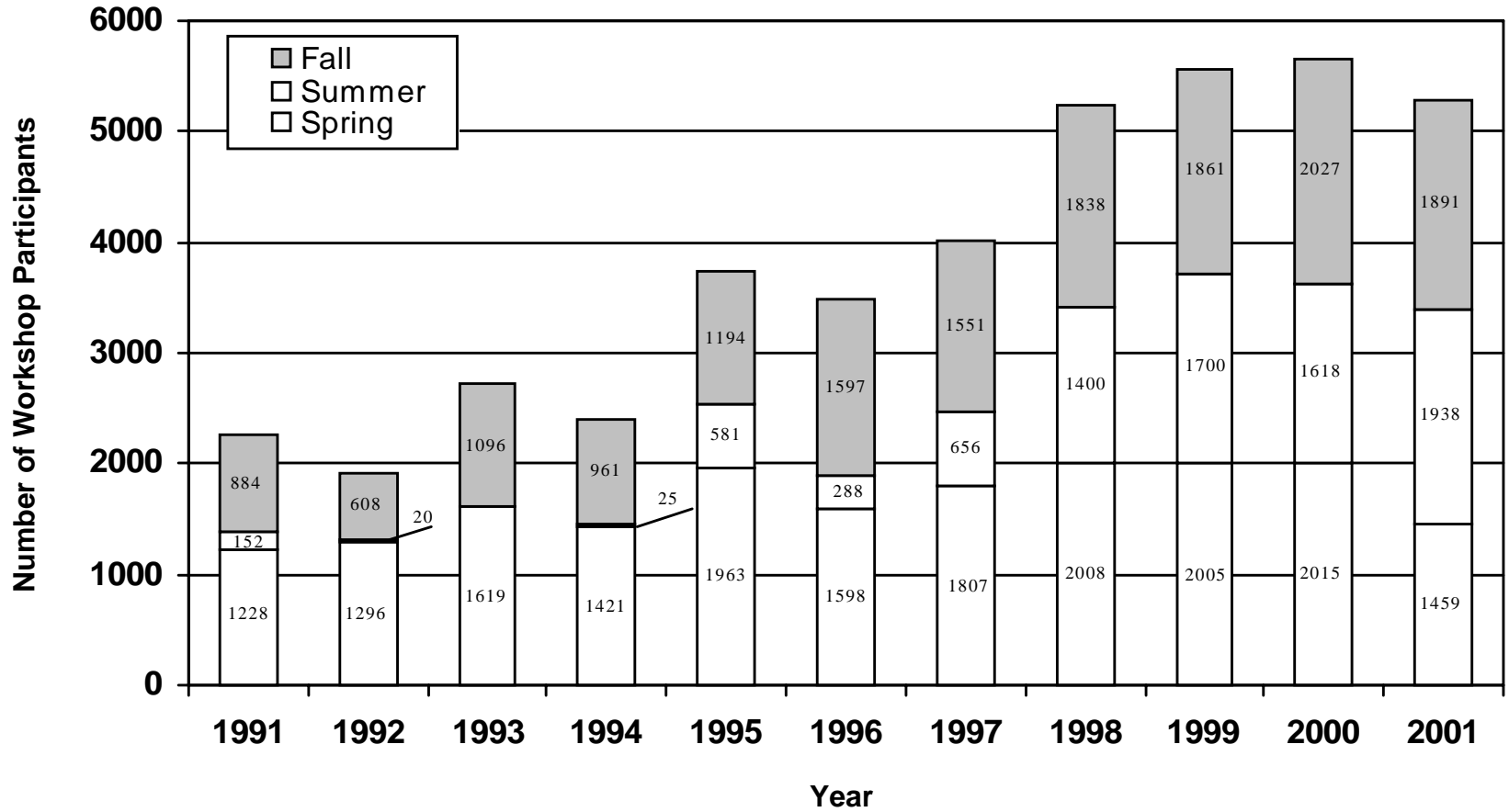
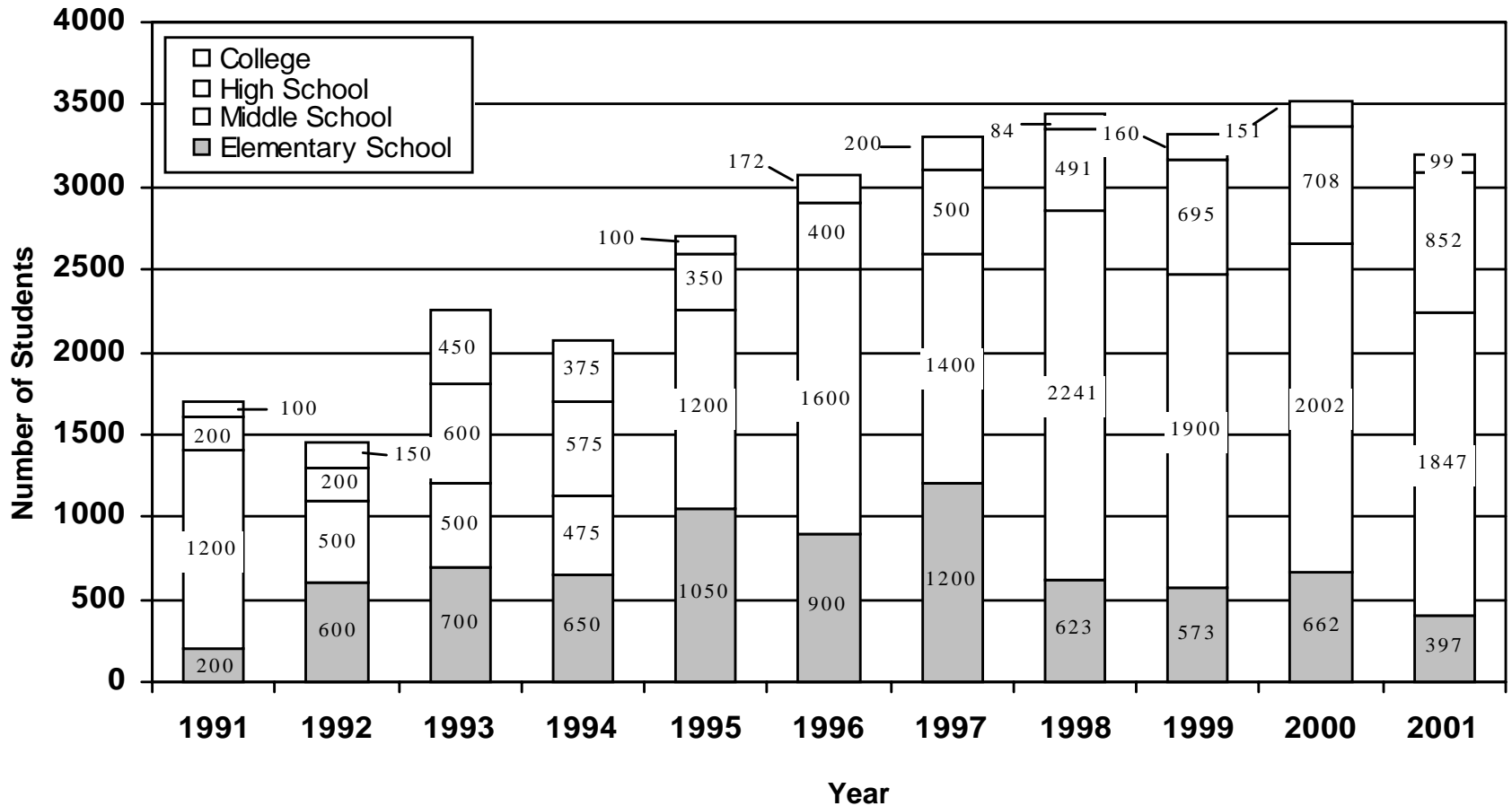


FIGURE 9

**Stone Laboratory Workshop Program: Composition of Participating Students*
1991-2001**



* Excluding adult groups

FIGURE 10

Research at Stone Laboratory: Number of Research Projects, Principal Investigators, Research Assistants, and Institutions 1995-2001

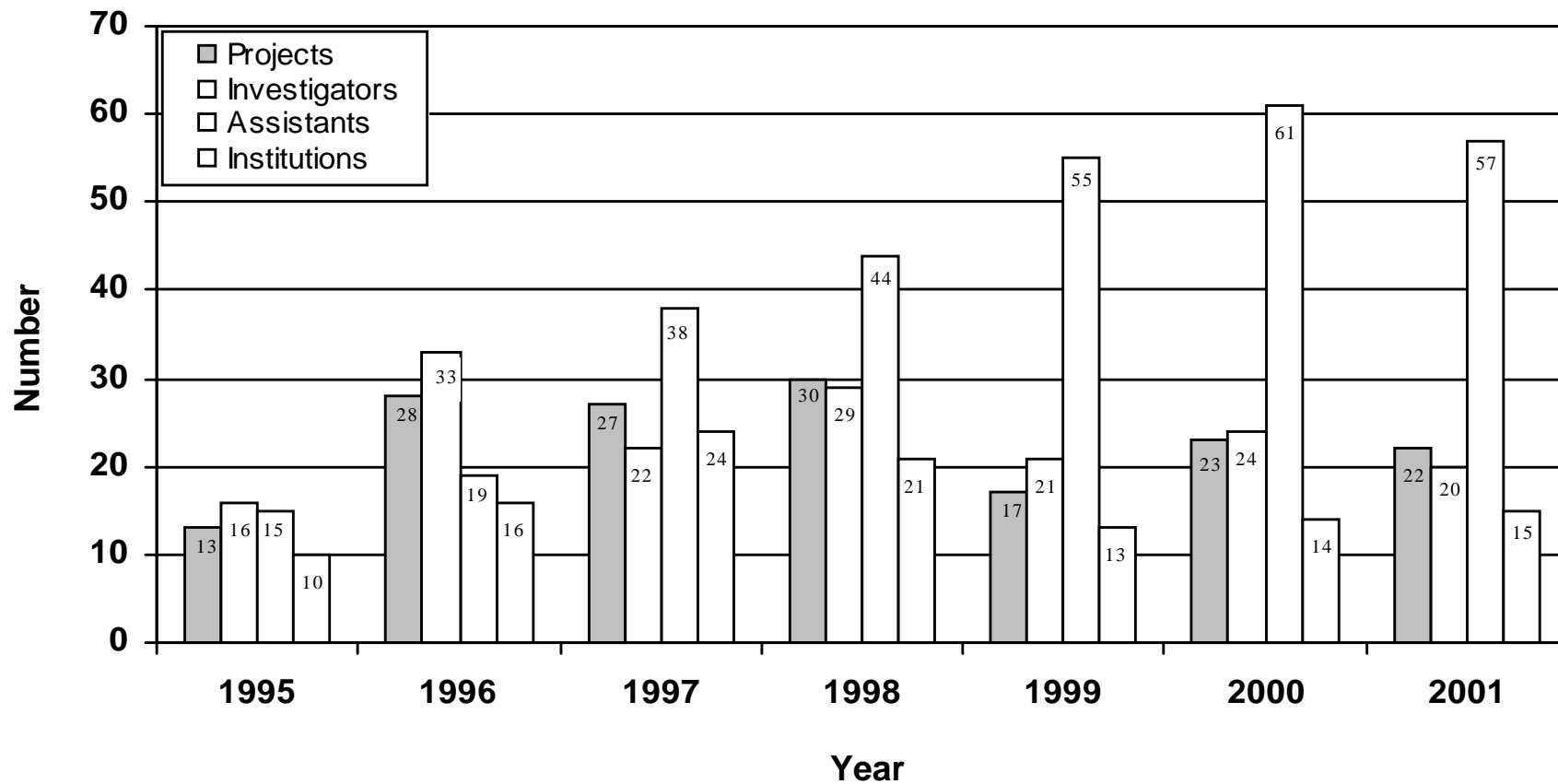


FIGURE 11

**Number of Students Receiving Stone Laboratory Scholarships for
Summer College Programs
1988-2001**

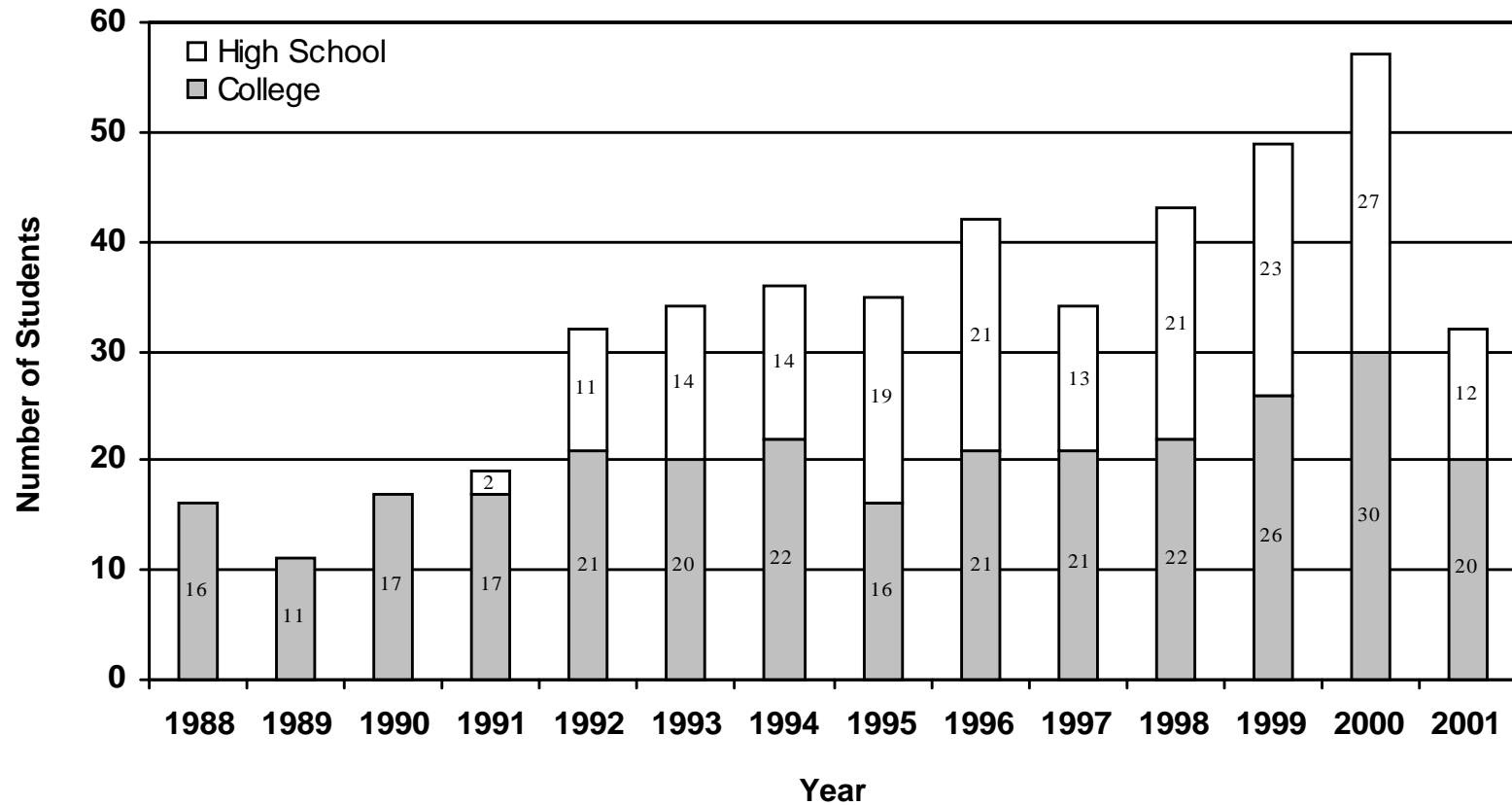


FIGURE 12

**Total Value of Scholarships Awarded to College and High School Participants
in Stone Laboratory Summer College Program
1988-2001**

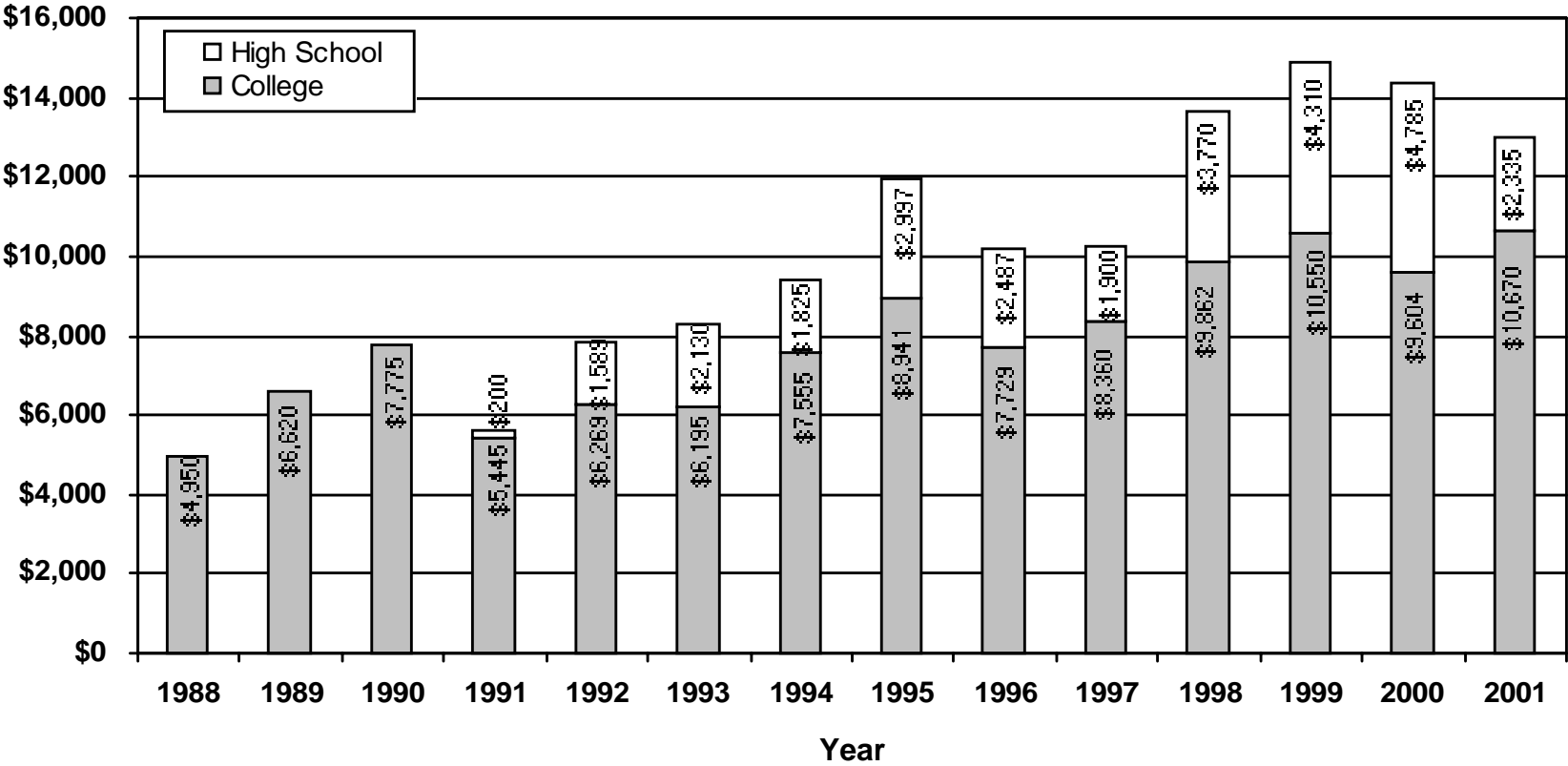


TABLE 1

**Stone Laboratory Staff
2001**

| Administration | | |
|----------------------------------|--|-----------------|
| Jeffrey M. Reutter | Director | |
| Bonita C. Cordi | Secretary and Receptionist | |
| Allen J. Duff | Building Maintenance Superintendent, Physical Facilities, Put-in-Bay | |
| Kelly L. Dress | Laboratory Office Associate, Put-in-Bay | |
| Rosanne W. Fortner | Associate Director | |
| John R. Hageman | Laboratory Manager, Put-in-Bay | |
| Richard D. Lighthiser | Director, Maintenance, Physical Facilities | |
| J. Stephen Martin | Manager, Housing and Food Service, Put-in-Bay | |
| Arleen N. Pineda | Program Coordinator | |
| Gerald K. Pullins | Assistant Director, Maintenance, Physical Facilities | |
| Karen T. Ricker | Communications Coordinator | |
| R. Chris Stanton | Assistant to the Director (to 8-31-01) | |
| Matt A. Thomas | Assistant Laboratory Manager, Put-in-Bay | |
| John L. Tripp | Business Manager | |
| Diane S. Whitbeck | Assistant Director, Housing, Food Services and Event Centers | |
| Teaching Faculty | | |
| David J. Berg | EEOB 125- <i>Introductory Aquatic Biology</i> | Aug 5 - Aug 11 |
| Diane H. Cantrell (Linda Pettit) | Natural Resources 691- <i>National Curricula for Water Education</i> | 7/1, 7/15, 7/22 |
| John M. Condit | EEOB 126- <i>Introduction to the Study of Birds</i> | Jun 10 - Jun 16 |
| “ | EEOB 694- <i>Ornithology for Teachers</i> | Jun 24 - Jun 30 |
| Rosanne W. Fortner | Natural Resources 611- <i>Great Lakes Education Workshop</i> | Jun 10 - Jun 16 |
| “ | Natural Resources 690- <i>Global Change Education</i> | Jul 8 - Jul 14 |
| “ | Natural Resources 691- <i>National Curricula for Water Education</i> | 7/1, 7/15, 7/22 |
| “ | Natural Resources 880- <i>Seminar in Natural Resources</i> | Jul 18 - Aug 18 |
| “ | Natural Resources 893- <i>Project Exploration Sem for Teachers</i> | Arranged |
| John E. Gannon | EEOB 653- <i>Fish Ecology</i> | Jul 19 - Aug 18 |
| Robert J. Gates | Natural Resources 694- <i>Waterfowl Ecology</i> | Jun 17 - Jun 23 |
| John R. Hageman | EEOB 692- <i>Ichthyoplankton Identification Workshop</i> | Jun 24 |
| Michael A. Hoggarth | EEOB 651- <i>Field Zoology</i> | Jun 17 - Jul 18 |
| Joseph R. Holomuzki | EEOB 694- <i>Stream Ecology for Teachers (at OWC)</i> | Jun 17 - Jun 23 |
| David L. Johnson | EEOB 125- <i>Introductory Aquatic Biology</i> | Jun 3 - Jun 9 |
| “ | EEOB 125- <i>Introductory Aquatic Biology</i> | Jul 1 - Jul 7 |
| David J. Jude | EEOB 653- <i>Fish Ecology</i> | Jul 19 - Aug 18 |
| Kenneth A. Krieger | EEOB 652- <i>Limnology</i> | Jun 17 - Jul 18 |
| Lawrence A. Krissek | Geological Sciences 107- <i>Field-Based Introduction to Oceanography</i> | Jun 10 - Jun 16 |
| “ | Geological Sciences 583- <i>Geologic Setting of Lake Erie</i> | Aug 4 - Aug 10 |
| “ | Geological Sciences 584- <i>Prin of Oceanography for Science Teachers</i> | Jul 22 - Jul 28 |
| “ | Geological Sciences 801- <i>Sem in Sedimentation & Sedimentary Rocks</i> | Aug 4 - Aug 10 |
| Scudder D. Mackey | Geological Sciences 583- <i>Geologic Setting of Lake Erie</i> | Aug 4 - Aug 10 |
| “ | Geological Sciences 801- <i>Sem in Sedimentation & Sedimentary Rocks</i> | Aug 4 - Aug 10 |
| David L. Moore | EEOB 611- <i>Higher Aquatic Plants</i> | Jul 19 - Aug 18 |
| Jeffrey M. Reutter | EEOB 692- <i>Ichthyoplankton Identification Workshop</i> | Jun 24 |
| Robert E. Roth | Natural Resources 691- <i>National Curricula for Water Education</i> | 7/1, 7/15, 7/22 |
| C.Lavett Smith | EEOB 621- <i>Ichthyology</i> | Jun 17 - Jul 18 |
| Frederic L. Snyder | EEOB 125- <i>Introductory Aquatic Biology</i> | Jul 29 - Aug 4 |
| R.Chris Stanton | Entomology 126- <i>Introductory Insect Biology</i> | Aug 12 - Aug 18 |
| Ann M. Stoeckmann | EEOB 652- <i>Limnology</i> | Jun 17 - Jul 18 |
| Carmen E. Trisler | Entomology 520- <i>Insect Biology for Teachers</i> | Jul 15 - Jul 21 |
| “ | Entomology 612- <i>Aquatic Entomology</i> | Jul 19 - Aug 18 |

Table 1 – 2001 cont'd**Graduate Teaching Associates**

| | | |
|------------------------------|---|----------|
| Marc A. Branham | Introductory Insect Biology | w11 |
| Paul F. Genzman ¹ | Great Lakes Education Workshop | w02 |
| “ | Global Change Education | w06 |
| Douglas D. Kane ¹ | Field Zoology | t1 |
| Grace M. Kilbane | Stream Ecology for Teachers | w03 |
| “ | Aquatic Entomology | t2 |
| David J. Manzo | Field-Based Introduction to Oceanography | w02 |
| “ | Principles of Oceanography for Science Teachers | w08 |
| Jennifer T. Matthews | Introduction to the Study of Birds | w02 |
| “ | Ornithology for Teachers | w04 |
| Michael J. Palmer* | Limnology | t1 |
| “ | Higher Aquatic Plants | t2 |
| Adrienne E. Smith | Insect Biology for Teachers | w07 |
| Thomas J. Thorne* | Fish Ecology | t2 |
| “ | Introductory Aquatic Biology | w01, w05 |
| Nicholas J. Utrup* | Ichthyology | t1 |
| “ | Introductory Aquatic Biology | w09, w10 |

*non-graduate Ohio State University teaching associate

¹ also enrolled in Stone Laboratory core courses

Student Research Assistants (also enrolled in Stone Laboratory courses)

| | |
|-----------------------|---|
| Samantha L. Fedor | Research for Miami University*, t2 |
| Michael J. Laudermith | Research, t2 trs |
| Jeffrey R. Niehaus | Research, t2 mwf |
| Gregory M. Ross | Research, t1 trs |
| Michael J. Vaughn | Research, t1 mwf (Charles R. Morin, Sr. Research Internship); |
| “ | Research for Miami University*, t2 |

* Student paid by researcher, not by Stone Lab

Student Assistants

| | |
|-----------------------|------------------------------|
| John C. Cannon | Laboratory, t1 trs, t2 mwf |
| Samantha L. Fedor | Laboratory, t1 mwf |
| Kerri L. Gibson | Library/Bookstore, t1 and t2 |
| John T. Hibler | Laboratory, t1 trs; t2 mwf |
| Michael J. Laudermith | Laboratory/Research, t2 trs |
| Jeffrey R. Niehaus | Library/Bookstore, t1 and t2 |
| Mark K. Tomasi | Laboratory, t1 mwf |

Table 1 – 2001 cont'd

Office and Technical Staff

| | |
|-------------------|--------------------------------------|
| Bonita C. Cordi | Office Associate, Columbus Office |
| Cindy A. Hayter | Graphic Illustrator, Columbus Office |
| Thomas J. Thorne | Courier, Put-in-Bay Office |
| Nicholas J. Utrup | Courier, Put-in-Bay Office |

Workshop Assistants

| | | |
|-------------------|--------|------|
| Neal J. Banaszak | | fall |
| Nancy J. Leonard | spring | |
| Kathryn McKay | | fall |
| Michael J. Palmer | spring | |
| Karen N. Riddle | spring | |
| Thomas J. Thorne | spring | fall |
| Michael T. Vaughn | | fall |

TABLE 2

**Stone Laboratory Curriculum
2001**

- EEOB 110 · Introduction to Local Flora** **CANCELLED**
Week 7, July 15-July 21.....Robert J. Bartolotta
An introduction to the identification and ecology of terrestrial and wetland vegetation.
3 undergraduate credit hours.
- EEOB 125 · Introductory Aquatic Biology**
Week 1, June 3-June 9.....Dr. David L. Johnson
Week 5, July 1-July 7.....Dr. David L. Johnson
Week 9, July 29-August 4Mr. Frederic L. Snyder
Week 10, August 5-August 11..... Dr. David J. Berg
An introduction to field techniques and the study of aquatic biology providing undergraduate credit for college students and advanced high school students. 3 undergraduate credit hours.
- EEOB 126 · Introduction to the Study of Birds**
Week 2, June 10-June 16.....Mr. John M. Condit
An introduction to the study of birds including field techniques and identification providing undergraduate credit for college students and advanced high school students. 3 undergraduate credit hours.
- EEOB 611 · Higher Aquatic Plants**
Term 2, July 19-August 18, MWFDr. David L. Moore
Aquatic plants, other than the algae of the Great Lakes region; field and laboratory work on their identification and ecological and geographical relations. 5 undergraduate/graduate credit hours.
- EEOB 621 · Ichthyology**
Term 1, June 17-July 18, MWF Dr. C. Lavett Smith
Study of the distribution and classification of fishes, which includes methods of identification, collection, and preservation. 5 undergraduate/graduate credit hours.
- EEOB 651 · Field Zoology**
Term 1, June 17-July 18, MWF Dr. Michael A. Hoggarth
Field and laboratory identification of aquatic and terrestrial vertebrates and invertebrates of the region, in relation to habitats occupied. 5 undergraduate/graduate credit hours.
- EEOB 652 · Limnology**
Term 1, June 17-July 18, TRSDrs. Kenneth A. Krieger and Ann M. Stoeckmann
Study of the physical, geological, chemical, and biological factors influencing freshwater life; field and laboratory techniques for determining lake morphometry, chemistry, and biological productivity are emphasized. 5 undergraduate/graduate credit hours.

EEOB = Department of Evolution, Ecology, and Organismal Biology

Table 2 - 2001 cont'd

EEOB 653 · Fish Ecology

Term 2, July 19-August 18, TRS Drs. John E. Gannon and David J. Jude
Field and laboratory studies of life histories and interspecific relationships of fishes, and of the various factors influencing their abundance. 5 undergraduate/graduate credit hours.

EEOB 694 · Ornithology for Teachers

Week 4, June 24-June 30.....Mr. John M. Condit
Field and laboratory studies of the visual and acoustical characteristics of common Ohio birds; discussion of world-wide birds and their classification; identification of resource materials for classroom use; for classroom teachers and non-formal educators. 3 undergraduate/graduate credit hours.

Entomology 126 · Introductory Insect Biology

Week 11, August 12-August 18.....Dr. R. Chris Stanton
An introduction to the study of insects including biology, ecology, identification, and field techniques providing undergraduate credit for college students and advanced high school students. 3 undergraduate credit hours.

Entomology 612 · Aquatic Entomology

Term 2, July 19-August 18, MWFDr. Carmen E. Trisler
For preparation in the teaching of biology or for research on aquatic resources; emphasis on taxonomy and ecology of immature and adult aquatic insects. 5 undergraduate/graduate credit hours.

Entomology 520 · Insect Biology for Teachers

Week 7, July 15-July 21Dr. Carmen E. Trisler
A hands-on course for K-12 teachers in formal and informal education. Includes morphology, identification, and unique behaviors of insects as well as activities to use with students for both terrestrial and aquatic insects. Teachers will each develop meaningful and useful curriculum activities about insects. 3 undergraduate/graduate credit hours.

Geological Sciences 107 · Field-Based Introduction to Oceanography

Week 2, June 10-June 16.....Dr. Larry A. Krissek
An introduction to the study of oceanography including field techniques providing undergraduate credit for college students and advanced high school students. 3 undergraduate credit hours.

Geological Sciences 584 · Principles of Oceanography for Science Teachers

Week 8, July 22-July 28Dr. Larry A. Krissek
Origin, development, and structure of oceanic basins and their contents; contemporary oceanic processes of geologic significance. Discussions of effective classroom presentations of oceanographic principles. Not open to students with credit for Geological Sciences 107 or 206. 3 undergraduate/graduate credit hours.

Natural Resources 510 · Natural History of Ohio

CANCELLED

Term 1, June 17 - July 18 TRS.....Drs. Robert E. Roth and R. Chris Stanton
Field course emphasizing inter-relationship among physical and biological factors in various ecological settings; development of field techniques and identification skills. 5 undergraduate/graduate credit hours.

Table 2 - 2001 cont'd

Natural Resources 611 - Great Lakes Education Workshop

Week 2, June 10 - June 16.....Dr. Rosanne W. Fortner
Techniques and curricula for presenting interdisciplinary aspects of the oceans and Great Lakes in formal and non-formal education settings. 3 undergraduate/graduate credit hours.

Natural Resources 690 - Global Change Education

Week 6, July 8 - July 14.....Dr. Rosanne W. Fortner
Materials and methods for presenting interdisciplinary aspects of global climate change and its impacts on global and regional settings. For classroom teachers, non-formal educators, or education majors with senior rank or above. 3 undergraduate/graduate credit hours.

Natural Resources 694 - Watershed, Estuarine and Coastal Ecology

CANCELLED

(Also cross listed as Civ. Eng. 694 and Food, Ag., and Bio. Eng. 694.)

Term 2, July 19 - August 18 TRS.....Drs. Virginie Bouchard, Timothy C. Granata,
Jay F. Martin and Ulrike Zika

A comprehensive review of ecology, physical processes and management of coastal zones and associated watersheds. Addresses the impacts of human development on natural processes. 5 undergraduate/graduate credit hours.

Natural Resources 694 - Waterfowl Ecology

Week 3, June 17 - June 23.....Dr. Robert J. Gates
Ecology, life history, and management of waterfowl (Anseriformes and related species) from a wetland habitat perspective. Emphasis on North American populations and wetland habitats. 3 undergraduate/graduate credit hours.

Natural Resources 841 - Outdoor Recreation Behavior

CANCELLED

Week 2, June 10 - June 16.....Dr. John L. Heywood
Analysis of theories related to understanding outdoor recreation behavior of individuals, social groups, and societal aggregations, and implications for managing recreation settings. The 15-hour biological sciences prerequisite is NOT required.

SPECIAL OFFERINGS:

EEOB 692 - Ichthyoplankton Identification Workshop

One Day, Sunday, June 24, 10:00 a.m.-6:00 p.m.....Mr. John R. Hageman and
Dr. Jeffrey M. Reutter

This workshop will take students, agency professionals and other interested individuals through the techniques involved with the collection and identification of common larval fishes of the Lake Erie drainage basin. May be taken as a non-credit workshop for \$200. This course is graded S/U.

EEOB 694 - Stream Ecology for Teachers

Week 3, June 17 - June 23.....Dr. Joseph R. Holomuzki
This course introduces high school teachers to hydrology, stream organisms, field techniques and experimental design in ways that can be applied in the classroom and field. Course held at Old Woman Creek, Ohio. 3 undergraduate/graduate credit hours.

Table 2 - 2001 cont'd

Geological Sciences 583 - Geologic Setting of Lake Erie

August 4-August 10Drs. Larry A. Krissek and Scudder D. Mackey
Examination of geologic features along the southern shore of Lake Erie during a week-long van trip, including an interpretation of the geologic history of Ohio in the Lake Erie basin, and an examination of relationships between human activity and the geology of the area. Approximate cost for room, meals, and transportation during one-week long van trip will be \$350. Class will originate from and end at the Fawcett Center in Columbus, Ohio. 3 undergraduate/graduate credit hours.

Natural Resources 614 - Marine and Aquatic Education: Tropical Studies CANCELLED

August 8-August 17 Dr. Rosanne W. Fortner and Helen M. Domske
A 10-day course at a marine lab in Jamaica, West Indies. Lectures and field study focusing on coral reefs; reef fish and invertebrates; symbiotic relationships; rocky shore zonation; mangrove swamps; turtle grass beds and others. Participants must have swimming/snorkeling proficiency. 3 undergraduate/graduate credit hours.

Natural Resources 691 - National Curricula for Water Education

Course consists of three Sundays, 10:00 a.m.-6:00 p.m. July 1, July 15, and July 22
.....Drs. Rosanne W. Fortner, Linda Pettit and Robert E. Roth
Materials, methods and certification for teaching with nationally acclaimed environmental curricula: Project WET, Aquatic WILD, and WOW (Wonders of Wetlands). This course is graded S/U. 2 undergraduate/graduate credit hours.

Natural Resources 880 - Seminar in Natural Resources

Quarter.....Dr. Rosanne W. Fortner
Course consists of attendance to Thursday evening scheduled Stone Laboratory Guest Lectures during Summer Quarter. This course is graded S/U. 1 graduate credit hour.

Natural Resources 893 - Project Exploration Seminar for Teachers

To be arranged during Term 1Dr. Rosanne W. Fortner
Individual studies in selected areas not otherwise offered in natural resources. Graduate standing and permission of instructor. This course is graded S/U. 3 graduate credit hours.

Individual Studies 293/693

Qualified students may select problems in botany, entomology, microbiology, zoology or other participating departments, and may choose the instructor with whom they desire to work. 1-5 credit hours.

Research 998/999

This number is reserved for graduate students in a degree program conducting research for a M.S. thesis or Ph.D. dissertation.

Honor Course H783

This number is reserved for students in the honors program desiring to select problems in Individual Studies.

TABLE 3

**STONE LABORATORY GUEST LECTURES*
2001**

All lectures begin at 7:45 PM. A university boat leaves the dock in front of the Research Building at 7:15 PM before each lecture. Lectures normally conclude at approximately 9:00 PM. Transportation to and from Gibraltar Island is free.

| | | |
|----------------|------|--|
| Week 1 | 6/7 | No Lecture |
| Week 2 | 6/14 | Dr. Jane Forsythe , Bowling Green State University "The Geologic Setting of Lake Erie" |
| TERM 1 | | |
| Week 3 | 6/21 | Dr. Richard Sayre , Ohio State University "Engineering Microalgae to Recover Toxic Heavy Metals" |
| Week 4 | 6/28 | Dr. Charles E. Herdendorf , Ohio State University "The Adventure and Other Lake Erie Shipwreck" |
| Week 5 | 7/5 | John R. Kleberg , Asst. Vice President, Business and Finance, OSU "Jay Cooke and his Castle" |
| Week 6 | 7/12 | Dr. Robert Heath , Kent State University "Many Paths of Energy Flow at the Base of the Food Web" |
| Week 7 | 7/19 | Transition between terms—No Lecture |
| TERM 2 | | |
| Week 8 | 7/26 | Mike Costello , Lake Erie Prog. Admin., ODNR, Division of Wildlife "Incorporating Human Dimensions in Fisheries Management" |
| Week 9 | 8/2 | Christopher Jones , Director, Ohio EPA "Environmental Regulation in an Age of Hyperbole" |
| Week 10 | 8/9 | Jeffrey Hoedt , Chief, Ohio Division of Watercraft "Boat Ohio: Planning for the Future" |
| Week 11 | 8/16 | Finals Week—No Lecture |
| Week 12 | 8/25 | Open House—11:30-4:00 Saturday—Open to Public Friends of Stone Laboratory Annual Meeting and Educational Programs and Tours of Gibraltar Island and South Bass Island Lighthouse |

- Sponsored by the Friends of Stone Laboratory and the Office of Housing, Food Service and Event Centers

TABLE 4

**Stone Laboratory Workshops, Conferences and Tours
2001**

| Date | Group Name/City/Leader | No. | Description |
|-------------|--|------------|--------------------|
| 4/17 | Dr. Inger Weideman / Denmark | 1 | Tour |
| 4/17 | U.S. State Dept. / Washington D.C. Allison Baker | 1 | Tour |
| 4/17 | U.S.G.S. / Ann Arbor, MI John Gannon and Nancy Milton | 2 | Tour |
| 4/18 | Mellisa Hauser | 1 | Shadow |
| 4/18-19 | Worthington Christian H.S. / Worthington, OH Bill Williams | 19 | Workshop |
| 4/18 | South Central H.S. / Greenwich, OH Jami Scott-Honingford | 16 | Workshop |
| 4/19 | Wynford H.S. / Bucyrus, OH Glen Smith | 32 | Workshop |
| 4/19 | Justin Tank / Elmore, OH Betsy Tank | 2 | Shadow |
| 4/19-20 | Jonathan Alders H.S./ Plain City, OH Brenda Boyd | 12 | Workshop |
| 4/21-22 | Friends of Stone Lab Work Weekend Michael McBride | 16 | Work Weekend |
| 4/23-24 | Northwood M.S. I / Northwood, OH Lara Fish | 38 | Workshop |
| 4/24 | Northwood M.S. II / Northwood, OH Lara Fish | 47 | Workshop |
| 4/25 | Clay High School / Oregon, OH Dennis Slotnick | 10 | Workshop |
| 4/25-27 | Sewickley Academy 8th Grade / Sewickley. PA Lisa Helbeiling | 68 | Workshop |
| 4/26 | Mallory Hageman / Toledo, OH Kim Hageman | 4 | Tour |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|---|------------|--------------------|
| 4/27 | Sells Middle School / Dublin, OH Corinne Evans | 25 | Workshop |
| 4/27-28 | Minford Middle School / Milford, OH Lisa Jeffery | 21 | Workshop |
| 4/30-5/1 | Mills School 6 th Grade I / Sandusky, OH Patricia Hamilton | 44 | Workshop |
| 5/1-2 | Mills School 6 th Grade II / Sandusky, OH Patricia Hamilton | 45 | Workshop |
| 5/2-3 | Mills School 6 th Grade III/ Sandusky, OH Patricia Hamilton | 58 | Workshop |
| 5/3-4 | Mills School 6 th Grade IV/ Sandusky, OH Patricia Hamilton | 50 | Workshop |
| 5/4 | St. Edwards High School / Lakewood, OH Guy Eckels | 32 | Workshop |
| 5/4-6 | O.S.U. Plankton Class / Columbus, OH Dr. David Culver | 28 | Workshop |
| 5/5 | Black River Middle School / Sullivan, OH Dave Reber | 14 | Workshop |
| 5/7-8 | Mills School 6 th Grade V / Sandusky, OH Patricia Hamilton | 46 | Workshop |
| 5/8-9 | Mills School 6 th Grade VI / Sandusky, OH Patricia Hamilton | 48 | Workshop |
| 5/9-10 | Mills School 6 th Grade VII / Sandusky, OH Patricia Hamilton | 48 | Workshop |
| 5/10 | Zak Sutphin and Viviana Gervasio / Oxford, OH Miami University | 2 | Tour |
| 5/10-11 | Miamisburg and West Carrollton / Miamisburg, OH 5 th Grades Susan Baker & Jean Kremmer | 53 | Workshop |
| 5/11 | O.S.U. Lima – Reaching Out to Youth / Lima, OH Hope Raschke | 17 | Workshop |
| 5/12 | Muskingum College / New Concord, OH Jim Shellard | 15 | Workshop |
| 5/12 | O.S.U. Geology Class / Columbus, OH Dr. Larry Krissek | 12 | Workshop |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|---|------------|--------------------|
| 5/14 | Amherst Steele H.S. / Amherst, OH Darline Elsasser | 50 | Workshop |
| 5/14 | Francesca Slimane & Emma Geraghty / Poole, England | 2 | Tour |
| 5/14-15 | McCord/Perry Middle School / Worthington, OH Marty McTigue | 68 | Workshop |
| 5/15-16 | Village Academy 6 th and 7 th Grade / Powell, OH Monte McCulloch | 61 | Workshop |
| 5/16-18 | Bloom Carroll, Fairfield Union & Liberty Union High Schools / Carroll, OH Diane Gabriel | 51 | Workshop |
| 5/18 | Rogers High School / Toledo, OH C.J. Washington | 20 | Workshop |
| 5/21 | Ashland Co. Intervention Center / Ashland, OH John Bryan | 13 | Workshop |
| 5/21-22 | Buckeye Valley Middle School / Delaware, OH Amos Price | 51 | Workshop |
| 5/22 | O.D.N.R. Division of Watercraft / Columbus, OH John Wisse | 15 | Tour |
| 5/22-23 | Erwine Middle School / Akron, OH Jim Trogdon | 51 | Workshop |
| 5/23-24 | Englewood Elementary / Englewood, OH Sis Litvin | 25 | Workshop |
| 5/24 | Springfield South High School / Springfield, OH Michael Willets | 8 | Workshop |
| 5/24-25 | Toth Elementary / Perrysburg, OH Kay Wagner | 63 | Workshop |
| 5/29-30 | Horizon Devilbis TPS 6 th Grade I / Toledo, OH Dinah Lattin | 34 | Workshop |
| 5/30-31 | Horizon Devilbis TPS 6 th Grade II / Toledo, OH Dinah Lattin | 44 | Workshop |
| 5/31 | Lake High School / Millbury, OH Jessie Kubuske | 27 | Workshop |
| 5/31-6/1 | Jones Middle School / Upper Arlington, OH David Evans | 36 | Workshop |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------|---|-----|-------------|
| 6/2 | Northern Ohio Herpetological Society / Cleveland, OH Norm Damm | 13 | Tour |
| 6/4 | Ft Jennings Envirothon / Ft. Jennings, OH Jeff Jostville | 9 | Workshop |
| 6/5 | Whiteford Middle School / Ottawa Lake, OH Susan Bixler | 90 | Workshop |
| 6/5-7 | O.D.N.R. Wildlife Meeting / Columbus, OH Steve Gray | 14 | Conference |
| 6/7 | Grizzel Middle School / Dublin, OH Larry Hohman | 66 | Workshop |
| 6/9 | New State Legislators / Columbus, OH Jeff Reutter | 50 | Workshop |
| 6/14 | Visitors to See Guest Lecturer Dr. Jane Forsyth | 44 | Tour |
| 6/15 | Northwest District Extension Office / Findlay, OH Jerry Thomas | 11 | Conference |
| 6/16 | Williams Co. Extension / Bryan, OH Florian Chirra | 20 | Conference |
| 6/21 | Visitors to See Guest Lecturer Dr. Richard Sayre | 34 | Tour |
| 6/22 | Fred Snyder Family | 3 | Tour |
| 6/26 | B.G.S.U. Governors Summer Institute I / OH Matt Partin | 30 | Workshop |
| 6/26 | James Edmister | 10 | Tour |
| 6/28 | Visitors to See Guest Lecturer Dr. Charles Herdendorf | 67 | Tour |
| 7/4 | Richard and Louise Werner | 2 | Tour |
| 7/4 | George and Linda Norris | 2 | Tour |
| 7/5 | Visitors to See Guest Lecturer John R. Kleberg | 37 | Tour |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|------|---|-----|-------------|
| 7/5 | Virginia Trellaway | 8 | Tour |
| 7/9 | Howser Family | 9 | Tour |
| 7/10 | B.G.S.U. Governors Summer Institute II / OH Matt Partin | 26 | Workshop |
| 7/11 | Cleveland Scholarship Program I / OH Stacy Watts | 49 | Tour |
| 7/11 | Girl Scouts of Erie Shores / Lorain, OH Brenda Warren | 19 | Workshop |
| 7/12 | Visitors to See Guest Lecturer Dr. Robert Heath | 14 | Tour |
| 7/13 | Cleveland Scholarship Program II / OH Stacy Watts | 40 | Tour |
| 7/12 | Great Lakes Area Ecosystem Research Consortium / OH Jeff Reutter | 28 | Conference |
| 7/13 | Ohio Chapter of American Fisheries Society / OH | 22 | Conference |
| 7/15 | International Coastal Zone Management / Columbus, OH Mike Colvin | 28 | Tour |
| 7/16 | Donauer Family | 2 | Tour |
| 7/17 | O.S.U. Wooster Faculty & Staff / Wooster, OH Bev Winner | 18 | Workshop |
| 7/18 | Beck Family | 2 | Tour |
| 7/19 | Reining Family Jim Reining | 4 | Tour |
| 7/19 | Ohio Legislators / Columbus, OH Jeff Reutter | 42 | Tour |
| 7/21 | Kent State University Geology Students / Kent, OH Dr. Eriksen | 19 | Tour |
| 7/23 | Rhonda Crawford | 2 | Tour |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|--|------------|--------------------|
| 7/24 | Glen Helen EcoCamp / Yellow Springs, OH Gil Disanto | 8 | Workshop |
| 7/26 | Visitors to See Guest Lecturer Mike Costello | 3 | Tour |
| 7/27 | Ohio E.P.A. Northeast District / Twinsburg, OH Roger Thoma | 23 | Workshop |
| 8/2 | M.E.T. Tours / Archabold, OH | 30 | Tour |
| 8/2 | U.R.S. Consulting / OH | 2 | Tour |
| 8/2 | Visitors to See Guest Lecturer Chris Jones | 15 | Tour |
| 8/3 | Susan Richburg | 31 | Tour |
| 8/4 | Tom Kobol | 4 | Tour |
| 8/6 | Marion Rotary Board of Trustees / Marion, OH Jackie Armstrong | 13 | Conference |
| 8/6 | Englewood Hills School Faculty / Trenton, OH Dee Wells | 36 | Workshop |
| 8/7 | Bob Schott | 2 | Tour |
| 8/7 | Donauer Family | 7 | Tour |
| 8/9 | Ottawa National Wildlife Refuge / Oak Harbor, OH Rebecca Hinkle | 19 | Tour |
| 8/9 | Visitors to see Guest Lecturer Jeff Hoedt | 3 | Tour |
| 8/10-12 | Sandusky Experimental Radio League / Sandusky, OH Denny McManamon | 6 | Conference |
| 8/13 | Brenda Culler, Sandusky Register / Sandusky, OH | 2 | Tour |
| 8/15 | O.S.U. Extension with U.S. Legislative Aides | 12 | Tour |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|---|------------|--------------------|
| 8/18 | Boy Scout Troop 149 / Toledo, OH Dave Dickie | 20 | Tour |
| 8/20 | U.S. Sen. Mike DeWine / Washington D.C. | 36 | Tour |
| 8/20-21 | O.S.U. Wooster / Wooster, OH Sally Miller | 10 | Workshop |
| 8/22-24 | O.S.U. Residents Life / Columbus, OH Scott Boden | 45 | Conference |
| 8/24-26 | Friends of Stone Lab / Columbus, OH Michael McBride | 20 | Conference |
| 8/25 | Stone Lab Open House - Gibraltar Island | 550 | Tour |
| 8/25 | Stone Lab Open House – South Bass Is. Lighthouse | 220 | Tour |
| 8/29-30 | Phillips Osborne Middle School / Painesville, OH Meg Anderson | 22 | Workshop |
| 8/30-31 | Hathaway Brown High School / Shaker Heights, OH Beth Armstrong | 75 | Workshop |
| 9/4-5 | Grace Brethren Home Schools / Centerburg, OH Nancy Baier | 28 | Workshop |
| 9/5-6 | O.S.U. Master Gardeners / Wooster, OH Denise Ellsworth | 31 | Workshop |
| 9/5-6 | O.S.U. – A.T.I. Staff / Wooster, OH Pat Harbert | 19 | Workshop |
| 9/6 | Inland Seas Museum Staff / Vermillion, OH Carla LeVeighn | 9 | Tour |
| 9/6-7 | Woodside Middle School / Ft. Wayne, IN Jeff Beck | 32 | Workshop |
| 9/7 | Jefferson Elementary / Port Clinton, OH Jim Bergeman | 52 | Workshop |
| 9/11-12 | Hilliard Tharp 6 th Grade I / Hilliard, OH Jan Snyder | 42 | Workshop |
| 9/12 | O.S.U. Ext. Community Development / Columbus OH David Patton | 10 | Conference |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|--|------------|--------------------|
| 9/12 | Genoa H. S. German Exchange Students / Genoa, OH | 20 | Tour |
| 9/12-13 | Hilliard Tharp 6 th Grade II / Hilliard, OH Jan Snyder | 41 | Workshop |
| 9/13 | N.W. District Farm Service Agency / Oak Harbor, OH Todd Warner | 25 | Conference |
| 9/13-14 | Hilliard Tharp 6 th Grade III / Hilliard, OH Jan Snyder | 40 | Workshop |
| 9/14 | Greensprings Elementary / Greensprings, OH MaryAnn Voggenthaler | 28 | Workshop |
| 9/14-15 | Sandusky Experimental Radio League / Sandusky, OH Denny McManamon | 7 | Conference |
| 9/15 | Owens Community College / Toledo, OH Mary Kaczinski | 8 | Workshop |
| 9/17 | Avon High School / Avon, OH Tess Wearsh | 20 | Workshop |
| 9/17-18 | Brecksville High School / Brecksville, OH Bob Berg | 18 | Workshop |
| 9/18 | Bataan Elementary / Port Clinton, OH Bob Berg | 42 | Workshop |
| 9/19 | Portage Elementary / Port Clinton, OH Greg Twarek | 44 | Workshop |
| 9/20 | Highland High School / Medina, OH Betsy Gleason | 40 | Workshop |
| 9/21 | St. Mary of the Falls 8 th Grade / Olmsted Falls, OH Rick Rusnak | 32 | Workshop |
| 9/21 | McCormick Middle School / Huron, OH Elaine Bores | 120 | Tour |
| 9/21-22 | Milford Jr. High / Milford, OH Lisa Jeffery | 73 | Workshop |
| 9/24 | Amherst Steele High School / Amherst, OH Darline Elsasser | 60 | Workshop |
| 9/24 | West Holmes High School / Millersburg, OH Doug Mohr | 14 | Workshop |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|---|------------|--------------------|
| 9/24-25 | Bexley Middle School / Bexley, OH Marge Galloway | 51 | Workshop |
| 9/26 | Community College Beaver Co. / Monaca, PA Tom Heasley | 14 | Workshop |
| 9/27-28 | Dempsey Middle School / Delaware, OH Teresa Bettac | 29 | Workshop |
| 9/29 | Black River Middle School / Sullivan, OH Dave Reber | 17 | Workshop |
| 9/29 | NRE 810 Class, Ohio State Univ. / Columbus, OH Dr. Rosanne Fortner | 3 | Workshop |
| 10/1 | Put-in-Bay High School / Put-in-Bay, OH Paul Genzman | 20 | Workshop |
| 10/1-2 | Worthingway Middle School / Worthington, OH Kevin Swabb | 62 | Workshop |
| 10/2-3 | The Wellington School 7 th Grade / Columbus, OH Paul Grimes | 51 | Workshop |
| 10/3-5 | Columbus School for Girls 7 th Grade / Columbus, OH Lila Lack | 65 | Workshop |
| 10/5 | Lakota Jr. High / Amsden, OH Tom Bentley | 35 | Workshop |
| 10/5 | McAuley High School / Cincinnati, OH Mary Ellen Ohr | 18 | Workshop |
| 10/5-6 | Mount Union College / Alliance, OH Lin Wu | 8 | Workshop |
| 10/8 | Bay High School / Bay Village, OH Chet Sadonick | 13 | Workshop |
| 10/8-9 | Robinson Jr. High / Toledo, OH Diane McClellan | 33 | Workshop |
| 10/10-11 | Rocky River Middle School / Rocky River, OH David Opdycke | 32 | Workshop |
| 10/11 | Lee Burneson Middle School / Westlake, OH Kelly Sherwood | 101 | Tour |
| 10/11 | Heights Tiffin City School 8 th Grade / Tiffin, OH Danielle Blust | 23 | Workshop |

Table 4 – cont'd

| Date | Group Name/City/Leader | No. | Description |
|-------------|---|-------------|--------------------|
| 10/15 | Gibsonburg High School / Gibsonburg, OH Stacy Gabel | 96 | Workshop |
| 10/12-14 | O.S.U. EEOB 647 Class / Columbus, OH Dr. David Culver | 11 | Workshop |
| 10/12-13 | Granville Middle School / Granville, OH Kay Porr | 18 | Workshop |
| 10/13-14 | Little Princesses / Columbus, OH Mike Fligner | 19 | Workshop |
| 10/15-17 | Hudson Middle School I / Hudson, OH Ken Radie | 33 | Workshop |
| 10/17-19 | Hudson Middle School II / Hudson, OH Ken Radie | 37 | Workshop |
| 10/19-20 | Lake Ridge Academy High School / North Ridgeville, OH Putnam West High School / Oklahoma City, OK Jane Maczuzak | 42 | Workshop |
| 10/22 | Franklin Elementary / Elyria, OH Holly Kramer | 52 | Workshop |
| 10/23-24 | Evangel Christian Academy 10 th Grade / Gahanna, OH Robert Shauck | 28 | Workshop |
| 10/24 | Barb Brewer, U.R.S. Consulting on Coastal Erosion | 2 | Tour |
| 10/24-25 | Bellevue Jr. High / Bellevue, OH Dave Meadows | 26 | Workshop |
| | TOTAL = | 5288 | |

TABLE 5

**Stone Laboratory Scholarship Recipients
2001**

| <i>Name</i> | <i>Institution</i> | <i>Name of Scholarship</i> |
|--------------------------|-----------------------|-----------------------------|
| Axford, Timothy | Elyria High | Franz and Kate Stone |
| Bircher, Lisa | Ohio State Univ | Friends of Stone Lab |
| Bixel, Melinda | Ohio State Univ | Friends of Stone Lab |
| Blatt, Angela | Ohio State Univ | Friends of Stone Lab |
| Castor, Sarah | Bryan High | Franz and Kate Stone |
| Cates, Richard | Fayetteville High | Franz and Kate Stone |
| Dai, Amy | Ohio State Univ | McDonald's |
| DeLotell, Megan | Valley View High | Franz and Kate Stone |
| Duan, Hongxia | Ohio State Univ | Pepsi-Cola Bottling Company |
| Hardesty, Amanda | Fayetteville High | Franz and Kate Stone |
| Hollinger, Shona | Ohio Univ | Friends of Stone Lab |
| Holton, Sarah | Bishop Watterson High | Franz and Kate Stone |
| Jones, Lyndsey | Ohio State Univ | Pepsi-Cola Bottling Company |
| Jones, R Bryan | Ohio State Univ | Friends of Stone Lab |
| Laudermith, Michael | Wittenberg Univ | Ray Frederick |
| Ledford-Jones, Catharine | Ohio State Univ | Karen Jennings |
| LeNoue, Michele | Ohio State Univ | Franz and Kate Stone |
| Lin, Teresa | Westlake High | Polish Fishermen's Club |
| Lloyd, Sarah | Univ of Akron | Ray Frederick |
| Marschner, Caroline | Miami Univ | Ray Frederick |
| Meier, Amanda | Waynedale High | Franz and Kate Stone |
| Ongel, Sevinc | Ohio State Univ | Friends of Stone Lab |
| Parnell, Johari | Ohio State Univ | Pepsi-Cola Bottling Company |
| Parrish, Kathryn | Elyria High | Kelly Prochazka |
| Petitt, Amy | Elyria High | Kelly Prochazka & Wiczulis |
| Pittinger, Brett | Ohio State Univ | Friends of Stone Lab |
| Poznik, Jenica | Ohio State Univ | Sandusky CB & Fairport Rod |
| Sauer, Erin | Ursuline Academy High | State Science Day* |
| Studly, Darren | John Carroll Univ | Friends of Stone Lab |
| Tomasi, Mark | Ohio State Univ | TerrAqua |
| White, Sara | Ohio State Univ | Ray Frederick |
| Wilson, Kathleen | Geneva Area High | State Science Day* |

*State Science Day = Ohio Academy of Science State Science Day participant selected to receive an award from the Friends of Stone Laboratory scholarship fund.

TOTAL number of scholarships – 32

TOTAL value of scholarships – \$13,005

TABLE 6

**Stone Laboratory Student Roster -- 2001
(185 students)**

| <i>Name</i> | <i>Permanent City/State</i> | <i>Rank</i> | <i>Major</i> | <i>College</i> | <i>Institution</i> |
|-------------------|-----------------------------|-----------------------|-----------------------------|-----------------------|-----------------------------|
| Matthew Adkins | Winchester OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Karim Alasti | Columbus OH | Master's | Biology | Graduate | Ohio State Univ |
| Jeromy Applegate | Dublin OH | Master's | Fisheries Mgt | Food, Ag, and Env Sci | Ohio State Univ |
| Timothy Axford | Elyria OH | High School Junior | | | Elyria High |
| Amber Ballard | Dayton OH | High School Sophomore | | | Meadowdale High |
| Neal Banaszak | Parma OH | Senior | Fisheries | Natural Resources | Ohio State Univ |
| David Banta | Carrollton OH | Workshop Participant | Graduated from BGSU | NON-CREDIT | Bowling Green State Univ |
| Nathanael Barta | Murrysville PA | Master's | Geol Sci | Graduate | Ohio State Univ |
| Jamie Berning | Toledo OH | High School Senior | | | Notre Dame Academy High |
| Adam Betuel | Columbus OH | High School Sophomore | | | Whetstone High |
| Craig Biegler | Columbus OH | High School Sophomore | | | Upper Arlington High |
| Lisa Bircher | Columbiana OH | Graduate Non-Degree | Sec Educ-Science Comp | Graduate | Ohio State Univ |
| Melinda Bixel | Worthington OH | Master's | Natural Resources | Graduate | Ohio State Univ |
| Mark Blackstone | Gahanna OH | High School Junior | | | St Charles Preparatory High |
| Kevin Blake | Ottoville OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Angela Blatt | Powell OH | Junior | Fisheries Mgt | Natural Resources | Ohio State Univ |
| Eugene Braig | Columbus OH | Master's-Post Degree | | Graduate | Ohio State Univ |
| Marc Branham | Columbus OH | Ph.D. | Entomology | Graduate | Ohio State Univ |
| John Brehm | West Liberty OH | Senior | Fisheries Mgt | Natural Resources | Ohio State Univ |
| Laura Brewer | Cincinnati OH | Senior | Biology | Biological Sciences | Ohio State Univ |
| Amelia Brown | Columbus OH | High School Sophomore | | | Grandview Heights High |
| Zachary Brown | North Olmsted OH | Junior | Human Dimensions in Nat Res | Food, Ag, and Env Sci | Ohio State Univ |
| John Bucklew | Gibsonburg OH | Graduate Non-Degree | Sci Edu | Graduate | Ohio State Univ |
| John Cannon | Dublin OH | Senior | Biology | Biological Sciences | Ohio State Univ |
| Roxana Capper | Granville OH | High School Sophomore | | | Granville High |
| Sarah Castor | Bryan OH | High School Junior | | | Bryan High |
| Richard Cates | Fayetteville OH | High School Sophomore | | | Fayetteville High |
| Jason Cervenc | Rossford OH | Master's | Secondary Sci Edu | Graduate | Ohio State Univ |
| Jennifer Coelho | Columbus OH | High School Junior | | | Westland High |
| Joseph Conroy | Columbus OH | Senior | Biochemistry/Zoology | Arts and Sciences | Ohio State Univ |
| Chase Cordial | Columbus OH | High School Junior | | | Grandview Heights High |
| Sarah Corey | Columbus OH | Junior | Zoology | Arts and Sciences | Ohio State Univ |
| Kathleen Costello | Columbus OH | Graduate Non-Degree | Education | Graduate | Ohio State Univ |

| <i>Name</i> | <i>Permanent City/State</i> | <i>Rank</i> | <i>Major</i> | <i>College</i> | <i>Institution</i> |
|--------------------|-----------------------------|-----------------------|--------------------------|------------------------|------------------------------|
| Timothy Cox | Chardon OH | Senior | Fisheries Mgt | Natural Resources | Ohio State Univ |
| Bonnie Crim | Perrysburg OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Susan Culver | North Olmsted OH | Master's | Instructional Technology | Education | Baldwin-Wallace College |
| Amy Dai | Columbus OH | Master's | Science Educ | Graduate | Ohio State Univ |
| Kaneeka Dalton | Columbus OH | High School Senior | | | West High |
| Charles D'Andrea | Akron OH | Post-Graduate | Journalism | Continuing Education | Ohio State Univ |
| Lenora Danforth | Dublin OH | Master's | Education | Graduate | Ohio State Univ |
| Katie Deeter | Lima OH | High School Sophomore | | | Bath High |
| Megan DeLotell | Germantown OH | High School Junior | | | Valley View High |
| Hongxia Duan | Columbus OH | Ph.D. | Natural Resources | Graduate | Ohio State Univ |
| Jeremy Dulaney | Columbus OH | High School Junior | | | Marion-Franklin High |
| Coleen Edwards | Columbus OH | Master's+ | | Graduate | Ohio State Univ |
| Denise Ellsworth | N Canton OH | Graduate Non-Degree | Natural Resources | Graduate | Ohio State Univ |
| Rebecca Evans | Granville OH | Graduate Non-Degree | Education | Graduate | Ohio State Univ |
| Samantha Fedor | Columbus OH | Senior | Zoology | Arts and Sciences | Ohio State Univ |
| Ethan Feucht | Worthington OH | Master's | Geological Sciences | Graduate | Ohio State Univ |
| Phillip Foss | Ashland OH | Senior | Biology | | Ashland College/Univ |
| Art Gardella | Lancaster OH | Post-Graduate | Education | Continuing Education | Ohio State Univ |
| Paul Genzman | Put-in-Bay OH | Master's | Natural Resources | Natural Resources | Ohio State Univ |
| Kerri Gibson | Prospect OH | Senior | Zoology | Arts and Sciences | Ohio State Univ |
| Ted Gilliland | Rocky River OH | High School Sophomore | | | Rocky River High |
| Myesha Graham | Columbus OH | High School Junior | | | Marion-Franklin High |
| Wesley Grieger | Maumee OH | Senior | Comprehensive Science | Coll of Ed & Human Dev | Bowling Green State Univ |
| Michael Hall | Galloway OH | Master's+ | Environmental Educ | Graduate | Ohio State Univ |
| Stephanie Hall | McArthur OH | High School Junior | | | Vinton County High |
| Lemone Hammock | Columbus OH | High School Sophomore | | | Beechcroft High |
| Sarah Hanley | Columbus OH | Master's | Natural Resources | Graduate | Ohio State Univ |
| Amanda Hardesty | Fayetteville OH | High School Junior | | | Fayetteville High |
| James Harper | Grove City OH | Master's | Science Edu | Education | Ohio State Univ |
| Sara Hasley | New London OH | Senior | Elem Edu | Education | Ohio State Univ |
| Molly Helt | Powell OH | Post-Graduate | | Continuing Education | Ohio State Univ |
| Jennifer Hemmert | Centerville OH | Senior | Zoology | Arts and Sciences | Ohio State Univ |
| James Hengenus | Willoughby OH | High School Sophomore | | | Willoughby South High School |
| John Hibler | Zanesville OH | Junior | Ag Bus & Applied Econ | Food, Ag, and Env Sci | Ohio State Univ |
| Reginald Hollinger | Delaware OH | Master's+ | Education | Education | Ashland College/Univ |
| Shona Hollinger | Delaware OH | Senior | Integrated Sci Edu | Education | Ohio Univ |
| Sarah Holton | Powell OH | High School Junior | | | Bishop Watterson High |
| Ryan Hottle | Granville OH | High School Senior | | | Granville High |
| Lisa Huelskamp | Coumbus OH | Ph.D. | Env Edu | Graduate | Ohio State Univ |
| Laura Hurst | Napoleon OH | Senior | Biology | Education | Bowling Green State Univ |
| Mary Hutson | Worthington OH | Post-Graduate | | Arts and Sciences | Ohio State Univ |

| <i>Name</i> | <i>Permanent City/State</i> | <i>Rank</i> | <i>Major</i> | <i>College</i> | <i>Institution</i> |
|-------------------------|-----------------------------|-----------------------|-------------------------|--------------------------|----------------------------------|
| Cameron Hypes | Marion OH | High School Junior | | | Marion Catholic High |
| Jessica Iddings | Worthington OH | Junior | Biology | Arts and Sciences | Ohio State Univ |
| Jennifer Jauch | Columbus OH | Sophomore | Environmental Tech | Environmental Technology | Columbus State Community College |
| Jacqueline Jones | Columbus OH | High School Junior | | | Grandview Heights High |
| Lyndsey Jones | Westerville OH | Graduate Non-Degree | Wildlife Biology | Graduate | Ohio State Univ |
| R. Jones | Franklin OH | Graduate Non-Degree | Education | Graduate | Ohio State Univ |
| Joaquin Jordan | Powell OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Jason Jurey | Wadsworth OH | Junior | Natural Resources | Natural Resources | Ohio State Univ |
| Katherine Jurey | Wadsworth OH | High School Junior | | | Wadsworth High |
| Benjamin Kahler | Columbus OH | Senior | Wildlife Mgt | Natural Resources | Ohio State Univ |
| Douglas Kane | Columbus OH | Ph.D. | EEOB | Graduate | Ohio State Univ |
| Sean Kearns | Marion OH | Graduate Non-Degree | Bio Sci Edu | Graduate | Ohio State Univ |
| Susan Kenney | Anderson IN | Graduate Non-Degree | Aquatic Biology | Biological Sciences | Ball State Univ |
| Grace Kilbane | Delaware OH | Master's | Aquatic Ecology | Graduate | Ohio State Univ |
| Jeremy King | Columbus OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| John Kohli | Geneva OH | Sophomore | Pharmacy | Pharmacy | Ohio Northern Univ |
| Christina Kolp | Olmsted Falls OH | Senior | Biology/Envirntl Sci | Biology | Middlebury College |
| Susan Kos-Mayesky | Toledo OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Kelly Krupa | Hudson OH | Master's | Environmental Sci | Graduate | Ohio State Univ |
| Michael Laudermith | Schiller Park IL | Graduate Non-Degree | Biology | | Wittenberg Univ |
| Catharine Ledford-Jones | Franklin OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Michele LeNoue | Columbus OH | Master's | Environmental Sciences | Graduate | Ohio State Univ |
| Melissa Levering | Gates Mills OH | Sophomore | Environmental Eng | Engineering | Ohio State Univ |
| Meredith Levine | New Orleans LA | Junior | Exercise Sci/Psychology | Arts and Sciences | Tulane Univ |
| Sheila Lewicki | Olmsted Falls OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Mary Lightbody | Westerville OH | Ph.D. | SMAT | Graduate | Ohio State Univ |
| Teresa Lin | Westlake OH | High School Junior | | | Westlake High |
| Sarah Lloyd | Bowerston OH | Junior | Biology | Arts and Sciences | Univ of Akron |
| Thomas Lloyd | Worthington OH | Post-Graduate | | Continuing Education | Ohio State Univ |
| David Lowell | Orwell OH | Junior | Wildlife Biology | Natural Resources | Ohio State Univ |
| JoAnne Lusk | Waverly OH | Post-Graduate | | Continuing Education | Ohio State Univ |
| Jessica Mamais | Dublin OH | Master's | Edu | Graduate | Ohio State Univ |
| David Manzo | Wilmington OH | Master's | Geol Sciences | Graduate | Ohio State Univ |
| Caroline Marschner | Oxford OH | Master's | Restoration Ecology | Inst of Env Sci | Miami Univ |
| Donald Masaitis | Fairview Park OH | Master's+ | | Graduate | Ohio State Univ |
| Jennifer Matthews | Columbus OH | Ph.D. | EEOB | Graduate | Ohio State Univ |
| Matthew Maurer | Columbus OH | Ph.D. | Science Educ | Graduate | Ohio State Univ |
| Jasmine McConnell | Brookville OH | Senior | Wildlife Mgt | Food, Ag, and Env Sci | Ohio State Univ |
| Aaron McKenzie | Dublin OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Julie Meek | Reynoldsburg OH | Master's | Science Education | Education | Ohio State Univ |
| Amanda Meier | Apple Creek OH | High School Sophomore | | | Waynedale High |

| <i>Name</i> | <i>Permanent City/State</i> | <i>Rank</i> | <i>Major</i> | <i>College</i> | <i>Institution</i> |
|----------------------|-----------------------------|-----------------------|-------------------------------|----------------------|-------------------------------|
| Jennifer Messerly | Canal Winchester OH | Master's | | Graduate | Ohio State Univ |
| Holleh Moheimani | Columbus OH | High School Senior | | | Whetstone High |
| Jessica Morgan | Columbus OH | High School Junior | | | Fort Hayes Metro Educ Center |
| Barbara Morrison | Columbus OH | Graduate Non-Degree | Art | Graduate | Ohio State Univ |
| Michael Moxley | Vickery OH | Sophomore | Finance | Business | Ohio State Univ |
| Matthew Naujoks | Solon OH | High School Sophomore | | | Solon High |
| Erin Nenadal | Hudson OH | Senior | Adolescent Integrated Sci Edu | Education | Univ of Findlay |
| Rachel Nguyen | Columbus OH | High School Junior | | | Fort Hayes Career Center Voc |
| Jeffrey Niehaus | Columbus OH | Senior | Biology | Biological Sciences | Ohio State Univ |
| Sandra Nzimiro | Columbus OH | High School Junior | | | Beechcroft High |
| Sevinc Ongel | Columbus OH | Ph.D. | Science Education | Education | Ohio State Univ |
| Tanya Parisi | Middleburg Hts OH | Master's | Instructional Technology | Education | Baldwin-Wallace College |
| Johari Parnell | Glendale AZ | Master's | Elementary Education | Education | Ohio State Univ |
| Kathryn Parrish | Elyria OH | High School Junior | | | Elyria High |
| Michael Pascuzzi | Pittsburg PA | High School Junior | | | Mount Lebanon Senior High Sch |
| LeeAnna Pasker-Edens | Toledo OH | High School Senior | | | Start High |
| Samuel Perry | Blacklick OH | High School Junior | | | Eastmoor High |
| Kristen Petersen | Maumee OH | Senior | Painting/Drawing | Fine Arts | Ohio State Univ |
| Amy Pettitt | Elyria OH | High School Junior | | | Elyria High |
| Ashley Pickett | Columbus OH | High School Sophomore | | | South High |
| Brett Pittinger | Norton OH | Senior | EEOB | Arts and Sciences | Ohio State Univ |
| Pedro Ponce | Toledo OH | High School Junior | | | St John's Jesuit High Sch |
| Jenica Poznik | Columbus OH | Master's | Wetland Ecology | Graduate | Ohio State Univ |
| Joshua Pretzer | Vermilion OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Rebecca Raimonde | Pickerington OH | Master's | Science Edu | Graduate | Ohio State Univ |
| Judith Ratzenberger | Gahanna OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Ashley Rinehart | Columbus OH | High School Junior | | | Grandview Heights High |
| Gregory Ross | Shutesbury MA | Senior | Biology | Biological Sciences | James Madison University |
| Gregory Rowell | Mogadore OH | High School Senior | | | St Thomas Aquinas High |
| Rachel Russo | Columbus OH | Sophomore | Art Edu | Arts and Sciences | Ohio State Univ |
| Michael Sandel | Columbus OH | Sophomore | Zoology | Arts and Sciences | Ohio State Univ |
| Erin Sauer | Hamilton OH | High School Junior | | | Ursuline Academy High |
| Gregory Saurenman | Pickerington OH | Senior | Soc w/minor in NatRes | Arts and Sciences | Ohio State Univ |
| Justin Saydell | North Olmsted OH | High School Junior | | | North Olmsted High |
| Rebecca Schlisserman | Egbertsville NY | Sophomore | Biology | Arts and Sciences | Univ of Rochester |
| Gloria Schuman | Bowling Green OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| David Scott | Hilliard OH | Master's | Math Sci & Tech | Graduate | Ohio State Univ |
| Lori Scott | Columbus OH | Graduate Non-Degree | Education | Graduate | Ohio State Univ |
| Amanda Seagraves | Columbus OH | High School Junior | | | West High |
| Elin Seren | Columbus OH | Post-Graduate | Education | Continuing Education | Ohio State Univ |
| Jessica Siders | Columbus OH | Senior | Anthropology | Arts and Sciences | Ohio State Univ |

| <i>Name</i> | <i>Permanent City/State</i> | <i>Rank</i> | <i>Major</i> | <i>College</i> | <i>Institution</i> |
|--------------------|-----------------------------|-----------------------|------------------------|-------------------------------|----------------------------------|
| Elizabeth Simmons | Columbus OH | Master's | Environmental Edu | Graduate | Ohio State Univ |
| Adrienne Smith | Columbus OH | Master's | Entomology | Graduate | Ohio State Univ |
| Dana Smith | Columbus OH | Ph.D. | | Graduate | Ohio State Univ |
| Stuart Smith | North Fairfield OH | High School Sophomore | | | South Central High |
| Terry Stewart | Columbus OH | Master's | Ecological Engineering | Food, Ag, and Env Sci | Ohio State Univ |
| Michael Stoll | Toledo OH | High School Junior | | | St John's Jesuit High Sch |
| Darren Studly | Lyndhurst OH | Senior | Biology-Environmental | Biological Sciences | John Carroll Univ |
| Gretchen Swift | Columbus OH | Master's+ | ED-T&P | Graduate | Ohio State Univ |
| Lucy Talbot | Dayton OH | Junior | EEOB | Arts and Sciences | Ohio State Univ |
| Jennifer Thomas | Columbus OH | High School Junior | | | Centennial High |
| Benjamin Thompson | Columbus OH | Freshman | Biology | Biological Science | Columbus State Community College |
| Mark Tomasi | Wintersville OH | Senior | Fisheries Mgt | Natural Resources | Ohio State Univ |
| Mike Vaughn | Bellbrook OH | Senior | Environmental Health | Coll of Science & Mathematics | Wright State Univ |
| Dennis Versele | Bellefontaine OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| James Wallace | Litchfield OH | Master's+ | | Graduate | Ohio State Univ |
| Neil Waller | Columbus OH | Senior | Art | Art | Ohio State Univ |
| Michael Weis | Brunswick OH | High School Junior | | | Padua Franciscan High |
| Leon Weisenberger | Columbus OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Lynette Werner | Hopewell OH | Post-Graduate | | Continuing Education | Ohio State Univ |
| Darrell Weston | Columbus OH | High School Junior | | | Marion-Franklin High |
| Christopher Weyand | Columbus OH | High School Sophomore | | | Whetstone High |
| Sara White | Columbus OH | Master's | Environmental Educ | Graduate | Ohio State Univ |
| Rebecca Wigg | Columbus OH | Senior | Environmental Educ | Natural Resources | Ohio State Univ |
| Kathleen Wilson | Austinburg OH | High School Junior | | | Geneva Area High |
| Steven Winters | Columbus OH | Master's+ | Education | Graduate | Ohio State Univ |
| Thomas Wisard | Columbus OH | Graduate Non-Degree | | Graduate | Ohio State Univ |
| Jill Workman | Columbus OH | Master's | Early & Mid Childhood | Graduate | Ohio State Univ |
| Michelle Workman | Gahanna OH | Master's+ | | Graduate | Ohio State Univ |
| Theresa Zajkowski | Uniontown OH | High School Sophomore | | | Our Lady of the Elms High |