

Contact: Diana Gonzalez

IOWA LAKESIDE LABORATORY REGENTS RESOURCE CENTER
2015-2016 ANNUAL REPORT AND 2016-2017 BUDGET

Actions Requested: (1) Receive the 2015-2016 annual report of the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) and (2) recommend approval of the 2016-2017 budget for the Center.

Executive Summary: The ILLRRC annual report describes the activities undertaken in 2015-2016 to address the Center's Strategic Plan. The proposed budget (Attachment A) describes the planned objectives for 2016-2017. The proposed 2016-2017 budget for the Iowa Lakeside Laboratory Regents Resource Center has been reviewed by the Board Office and the Council of Provosts and is recommended for approval.

Background: For more than 100 years, Iowa Lakeside Laboratory has provided educational opportunities to the state of Iowa; the Regent universities offer science-based courses that allow students to study nature first-hand. The Regent Enterprise recognizes that its educational offerings can address a variety of statewide needs, including lifelong learning, especially for place-bound individuals; economic development; and entrepreneurship.

In September 2006, the Board of Regents approved (a) a name change from the Lakeside Laboratory to the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) to reflect its expanded functions, (b) a Strategic Plan which defined the mission, vision, and values, as well as short- and long-term objectives for the Center, (c) an increase in annual Regent university allocations from \$553,000 to \$600,000 for a five-year period,¹ and (d) assigning administrative responsibility for the Center to the University of Iowa through the Associate Provost and Dean of Continuing Education.

The ILLRRC Strategic Plan provided a springboard to expand the opportunities available through the Center (1) to meet the educational needs of northwest Iowa through the following key functions – scientific research, lifelong learning, entrepreneurship, and community involvement; and (2) to develop a model that can be used throughout the state to address unmet educational needs.

The Board also directed the Board of Regents Executive Director or designee and the Regent universities to conduct an in-depth evaluation during the fourth year (2010-2011) to determine both the continued viability of the Iowa Lakeside Laboratory Regents Resource Center and the ability to replicate the model throughout the state. The evaluation led to the development of a new strategic plan for the Center.

The ILLRRC continues to make progress by providing unique educational programs to university students, the public, K-12 students, and by collaborating with local associations and the Iowa Department of Natural Resources. During 2015-2016, the Center addressed its Strategic Plan's goals through the following activities.

¹ The universities' total allocation dropped below \$600,000 during the last three years and in the proposed budget.



The Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) is owned by the State of Iowa and operated through the Board of Regents. The 147-acre campus is located on scenic West Okoboji Lake. The bay and adjacent natural areas are used as outdoor classrooms for ILLRRC university courses and outreach program. The campus is open year-round and visitors are welcome during daylight hours.

Grounds and Natural Areas

ILLRRC occupies the entire shoreline of Little Miller's Bay on West Okoboji Lake. Most of the campus is natural land. The campus is divided into three sections: the Ecological Studies Campus, the Residential Campus, and the Teaching Campus.

- 📖 The Ecological Studies Campus occupies more than three-fourths of the land mass including the entire northern portion. The northwest portion called "The North 40" by faculty and staff is being restored to prairie. Twenty-three acres to the immediate east is reconstructed prairie that was planted in 2002-03. A second-growth woods of box elder and other trees separates these areas from West Okoboji Lake and the Residential Campus to the south.
- 📖 The Residential Campus includes the ILLRRC office, the facility manager's residence, faculty and student housing, bathhouse, dining hall, and adjacent lawns. A ravine shaded by burr oaks and other trees separates this part of ILLRRC from the Teaching Campus to the south.
- 📖 The Teaching Campus features a high knoll that slopes down to Little Miller's Bay. The Waitt Lab, Mahan Hall, library, all laboratories, Tamisiea Cottage, and Main Cottage are located here. The landscape is very naturalistic with prairie and meadows occupying the higher ground and oak woods/savanna growing near the lake. Native plant gardens are being developed near the Waitt Laboratory. A group of dedicated volunteers helps maintain ILLRRC's grounds and natural areas.

A description of surrounding natural areas and why this location was chosen is included in Attachment D which includes an excerpt of "The Iowa Lakeside Laboratory" written by Dr. Thomas Macbride.

This year's report focuses on three central themes: outreach and public programs; summer college courses; and academics and research. Of particular note are the Young Investigators Project (YI) which received increased funding from the Iowa Department of Natural Resources (IDNR), recognition from the Regent universities and state and national organizations, new college courses, and research projects of national and international significance.



OUTREACH AND PUBLIC PROGRAMS

Young Investigators: Connecting Children with Nature through Project Work (YI)

This program addresses the need in Iowa for a sustainable, nature-based, high-quality professional development training for early childhood educators. YI uses the project approach, a child-centered teaching method, to inspire students to love learning and to develop life-long, healthy connections with nature.

Intended Audience: YI is a high-quality professional development opportunity for early childhood educators focused on utilizing the project approach to integrate nature and the outdoors into their curriculum. The original goal was to include most Northwest Iowa early childhood educators and their administrators, associates and students in the YI training through a series of three cohorts over a five-year period, with each cohort receiving three years of training and coaching. YI has been so well received, it is in multi-year development.

Numbers Served: In 2015–2016, the program served 181 teachers, administrators and associates and 1,497 students from 39 Northwest Iowa school districts.

Primary Partnerships Vital to the Project: YI is provided by Nature Connections, a partnership of early childhood educators and professionals facilitated by Iowa Lakeside Lab with support from the Friends of Lakeside Lab. Additional partners include Prairie Lakes Area Education Agency, Upper Des Moines Opportunity Head Start, Creative Ventures, Northwest Area Education Agency, retired educators and area naturalists. In 2014, the Regents Center for Early Developmental Education (based out of the University of Northern Iowa), and Iowa State University early childhood faculty joined the YI partnership.

The Iowa Department of Natural Resources REAP CEP board voted to fully fund the 2015-16 grant request of \$49,967 for the fourth year of the YI program facilitated by Iowa Lakeside Lab and Regent Resource Center and the Nature Connections team.

Summary of 2015-2016 Outreach and Public Programs

Young Investigators

- Multi-year professional development program in Nature – Based Project Approach with follow up classroom coaching
- 181 teachers, associates and administrators
- 39 Northwest Iowa school districts

- 1,497 young learners impacted
- Facilitated by Nature Connections, collaborative of early childhood educators and professionals facilitated by Iowa Lakeside Lab

School Year Programs

- 1,120 students spring 2016
- 289 students fall 2015 (lower number reflects time spent on Young Investigators – see below)
- Total 1,409 students served
- \$5,661.70 in support from Friends of Lakeside Lab to cover facility rental and instruction fees

Summer Camps (each pre K–12 camp capped at 12)

- Seven day camps for ages pre K- 9
- 58 students
- Seven camperships (scholarships provided by the Friends of Lakeside Lab)

High School College Prep Diatoms

- 10 students from across Iowa (capped at 10 students)
- Competitive application process
- One or two week course option with one to two college credits earned
- 10 scholarships provided by Friends of Lakeside Lab

Summer Outreach Programs

- 250 participants – eight Wild Wednesdays: family science programs
- 350 participants – Lakeside Treasure Hike: self-guided nature/literacy hike on Lakeside grounds, local library partnerships
- Eight Friends Science Seminars – average attendance of 30-40 students and members of the public
- Three Lakeside Artist in Residence Open House, average attendance of 30 students and members of the public



Other Outreach

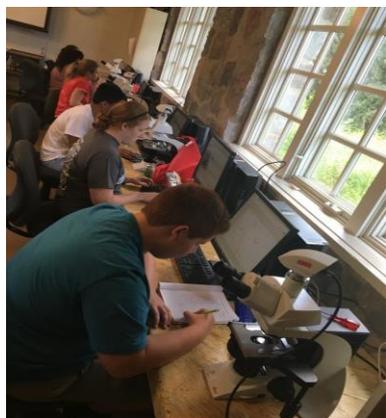
- Service groups (Girl Scouts, Kinship, Spencer Garden Club, Echo Plus): 158
- Peoples Environmental Art Project: 275
- Public writing workshops: Lakeside Writer in Residence programs: 20
- Total impacted: Approx. 453
- Lakeside Science Minute – weekly summer radio spots on science topics

Volunteer Programs

- 45 CLAMP volunteers, 405 hours (approx. 9 hours/volunteer including two hour training;)
- 30 Coffee and grounds, approx. 560 (approx. 10 volunteers/week x two hours x 28 weeks)
- 18 School year volunteers: approx. 180 volunteer hours (36 days x five hours)
- Total of 1,145 volunteer hours
- Total of 93 volunteers
- Does not include Nature Connections team hours

SUMMER COLLEGE COURSES

Summer enrollments at the university level were strong, supplemented in part by a second year of a credit course offered to high school students (*College Prep Diatoms*), a science teacher education course offered by the University of Northern Iowa, and the Okoboji Entrepreneurial Institute (OEI). The enrollment total was 135 (science-oriented, 96; teacher education, 7; and the OEI, 32). Among student totals, 51 were SUI, 38 ISU, 21 UNI, and the remainder from other institutions.



During the last several years, the Lakeside Lab Directors of Academics and Research have proposed new credit-bearing courses, with moderate success. Last year's plan was to more actively involve the campus liaison faculty, especially seeking out faculty at the Regent universities interested in teaching the courses. Shorter two-week (two credit) sessions were scheduled to provide options to students and faculty.

Academic advisors promote the Lakeside Lab as a field experience in various environmental subjects and the two week sessions allow students to participate in an immersion experience while at the same time allowing for summer employment.

The Director of Academics and Research Dr. Michael Lannoo continued to oversee a successful work study experience during the summer session. The work study program was a cooperative program with the Iowa Department of Natural Resources (DNR) funded to a large degree by the Okoboji Protective Association. Students participated in the program by taking a college course and working on campus and at public boat access ramps. The Iowa DNR provided training and scheduling for the boat ramp inspection and education program portion. The Academic and Research Director and Facility Coordinator supervised work experiences at the Lakeside Lab.

ACADEMICS AND RESEARCH

Summer 2016 was perhaps the most successful ever in terms of summer academic enrollment at Lakeside. In addition to traditional course offerings, including *Diatoms* (Mark Edlund and Sylvia Lee), *Ecology and Ornithology* (Neil Bernstein), *Archeology* (John Doershuk), *Algae* (Kalina Manoylov), and *Aquatic Ecology* (Paul Weihe, Mindy Morales), we offered several exciting new courses, including *Acoustic Ecology* (Alex Braidwood), *Lichens* (Jim Colbert), *Toxic Algae* (Mindy Morales), and *Biological Illustration* (Kim Moss). The Lab was at capacity for the first four weeks of the summer, and near capacity the rest of the summer. In 2017, the Lab is considering expanding to a 12-week curriculum.

The Friends Faculty Seminar Series was a huge hit, with an average attendance of approximately 56 people, and a maximum attendance of 89, with between a third and a half of attendees from the local community. Speakers included Mark Edlund (St. Croix Watershed Research Station), Peter Eyheralde (William Penn University), Josh Otten (University of Northern Iowa), Paula Furey (St. Catherine University), Grace Wilkinson, (Iowa State University), Matt Hill (University of Iowa), Chris Anderson (Iowa State University), and Sarah Bartlett (University of Wisconsin, Milwaukee).

Summer researchers at Lakeside included Bob Cruden (University of Michigan), Joe Lambert (Iowa State University), Brian Wilsey (Iowa State University), and Lori Biederman (Iowa State University). Lakeside researchers continued their collaboration with Mike Hawkins and Jonathan Meerbeek (Iowa Department of Natural Resources). Faculty published two papers (Justis et al., 2016, *Freshwater Science*; Stiles et al., 2016, *Journal of North American Herpetology*). The GLEON buoy (pictured) operated flawlessly throughout the summer.



2016 – 2017 PROPOSED BUDGET

IOWA LAKESIDE LAB REGENTS RESOURCE CENTER	FY 12 Actual	FY 13 Actual	FY 14 Actual	FY 15 Actual	FY16 Actual	FY 17 Budget
REVENUE						
Carry forward	\$153,439	\$71,557	\$65,554	-\$9,103	-\$27,569	-\$14,106
Regent university allocation	\$548,338	\$562,046 ¹	\$573,286	\$625,144 ²	\$592,061	\$592,061
Room and board	\$51,282 ⁷	\$56,565 ⁷	\$68,267 ⁷	\$47,516 ⁷	\$63,176	\$56,000
Center revenue	\$73,265	\$80,858	\$68,994	\$101,465	\$107,794	\$105,000
Friends and other support	\$48,895 ⁷	\$44,462 ⁷	\$71,644 ⁷	\$97,248 ⁷	\$88,085	\$101,700
Course fees	\$3,640	\$1,953	\$3,085	\$0	\$0	\$0
TOTAL REVENUE	\$878,859	\$817,440	\$850,830	\$862,270	\$823,547	\$840,655
EXPENDITURES						
Salaries and benefits	\$403,483	\$476,899 ¹	\$483,415	\$483,710	\$412,473	\$467,000
Travel and hospitality	\$41,078	\$31,679	\$37,829	\$54,619	\$50,793	\$51,000
Supplies and other	\$45,025	\$59,421	\$45,301	\$6,830	\$21,044	\$22,000
Utilities	\$35,416	\$45,820	\$53,679	\$49,616	\$47,738	\$50,000
Maintenance and repairs	\$166,667	\$94,817	\$156,992 ³	\$228,224 ⁴	\$235,803 ⁵	\$181,655
Equipment	\$18,329	\$18,513	\$49,698	\$47,991	\$20,066	\$25,000
Marketing	\$1,963	\$4,713	\$2,122	\$493	\$2,046	\$2,000
Tuition allocation to ISU/UNI/SUI	\$58,472	\$0 ⁶	\$0	\$0	\$0	\$0
Debt service	\$0	\$0	\$0	\$0	\$0	\$0
Scholarship expense	\$36,869	\$20,024	\$30,896	\$18,356	\$47,690	\$42,000
Operational planning	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL EXPENDITURES	\$807,302	\$751,886	\$859,934	\$889,838	\$837,653	\$840,655
NET BALANCE	\$71,557	\$65,554	-\$9,103	-\$27,569	-\$14,106	\$0

¹ Includes 2.5% for approved salary increases, additional courses offered in Summer 2013.

² Includes one time additional SUI funding of \$40,393.

³ Includes cost to move donated house \$18,000 – Forbes.

⁴ Includes additional \$129,680 costs related to donated house.

⁵ Includes \$108,180 costs related to donated house.

⁶ Reimbursement to ISU/UNI net with Center revenue, payment in FY13 for previous summer/winter.

⁷ Adjusted Friends reimbursement for room/board scholarships from Center Revenue (tuition) to Friends Support for FY12-FY15 for comparison to FY16.

IOWA LAKESIDE LABORATORY REGENTS RESOURCE CENTER 2013 STRATEGIC PLAN

Strategic Planning Committee

Chairperson: Stephen D. Hendrix (Biology, SUI)

Members: Tom Bedell (Friends of ILL), Lee Burras (Agronomy, ISU), Kavita Dhanwada (Biology, UNI), Diana Gonzalez (CAO, Board of Regents), Mike Lannoo (Indiana University School of Medicine), Mary Jean Montgomery (Friends of ILL), Sue Richter (Friends of ILL)

Report Summary

The Strategic Planning Committee reviewed numerous reports, plans, and other documents, all of which showed a consistent vision for Iowa Lakeside Laboratory. These documents, along with discussion by the committee, informed the creation of a new mission statement. This statement incorporates the traditional values and goals of Iowa Lakeside Laboratory with new ones reflecting its role as a Regents Resource Center. Previous reports and this Strategic Planning Committee observed the difficulty of reaching articulated goals; simultaneously those reports make numerous suggestions for improvements, many of which continue to hold merit. The major problem facing ILLRRC in attaining the goals of its mission is the failure to develop an administrative structure that can effectively implement (or discard for any variety of reasons) the many recommendations made previously in reports and by committees like this one. Indeed, ideas to improve ILLRRC continue to be made by numerous individuals associated with ILLRRC who remain passionate about the facility and its possibilities.

Outreach programs are strong, but could be strengthened if vigorous effort is put into initiating recommendations in this report. Academic programs critical to the mission of ILLRRC have struggled to maintain enrollments and a stable offering of courses. Recommendations are made to improve the student and faculty marketing/recruiting efforts for ILLRRC courses at Regent institutions and other colleges and to seek the incorporation of immersion field study courses as a specific requirement in majors at Regent institutions, both of which were identified as major problems facing the academic program. The Strategic Planning Committee also recognized the connection between academics and research at ILLRRC such that simultaneous improvement in both will have significant synergistic effects on attaining the goals of each. Specific recommendations have been made to encourage research at ILLRRC to revitalize this important component of the Lab's mission. An administrative recommendation is that the Executive Director position be reassigned to a different Professional and Staff category and that the position be redefined with appropriate qualifications, requirements, and duties to attain the outreach, academic, and research goals in the mission statement. Also recommended is the creation of an Advisory Board to assist the Executive Director and staff of ILLRRC in reaching its goals.

Introduction

The charge to the committee was to evaluate and suggest ways to improve outreach programs, academic programs, and the present administrative structure to fulfill the mission of ILLRRC. For each topic, the committee was provided a summary of relevant statements from previous reports, plans, and sets of potential recommendations to discuss and evaluate.

The following mission statement was developed and approved by the Strategic Planning Committee. It reflects the many different purposes of ILL as an RRC. The opening paragraph can be used as an abbreviated mission statement; the next two paragraphs summarize objectives and core values.

Mission Statement

The mission of the Iowa Lakeside Laboratory Regents Resource Center (ILLRRC) is to provide facilities and programming as a field station and community resource to support scientific education, research, and outreach programs of the Regent universities and other institutions. The education and research programs as well as collaborative activities of the ILLRRC also address state, national and international needs such as lifelong learning, entrepreneurial education, and economic development.

Science Education, Research, and Outreach Objectives

The ILLRRC offers and encourages science-based courses and learning opportunities that allow students from early childhood through adulthood to study nature first-hand. Core values include integrated research and education and the unique value of immersion learning in a natural setting. An objective of ILLRRC is to be recognized internationally as a premier site for the study of nature in nature. The primary research focus is on the diverse ecosystems that surround ILLRRC, with special emphases on water quality and the biodiversity of pristine or restored environments.

Lifelong Learning, Entrepreneurship, and Economic Development Objectives

Core values include ILLRRC's commitment to collaborations through partnerships and advocacy for the use of scientific research to inform public policy and economic development. To achieve these objectives, ILLRRC provides lifelong scientific and cultural learning opportunities to citizens of Iowa and beyond with on-site and distance learning programs. ILLRRC, in partnership with the Regent Universities, also sponsors on-site entrepreneurial educational workshops for students attending the Regent Universities.

Outreach Programs

The outreach programs are thriving and represent greatly improved, important connections to the Lakes Region community since Iowa Lakeside Laboratory became a Regents Resource Center in 2006. The Education Coordinator has indicated that secondary school outreach programs are at or near maximum enrollment given current staffing. The Okoboji Entrepreneurial Institute is a success. The recent development of a collaborative public arts and science project has increased important connections between the arts, ILLRRC, and the community of northwest Iowa. Finally, an early childhood consortium at the Lab provides unique opportunities for professional development on nature-based teaching and learning.

The Strategic Planning Committee identified five areas to be considered to improve the diversity of outreach offerings at ILLRRC and stimulate the connections between the ILLRRC and Iowa community of teachers, students, and citizens.

Outreach Programs Recommendations

1. Investigate a role for ILLRRC in implementation of the Iowa Core Curriculum and STEM initiatives.
2. Increase workshops that function as outreach for community lifelong learning to enrich citizens, students, and faculty of ILLRRC.
3. Reinvigorate the role of ILL in training and professional development of new and current teachers.

4. Increase course offerings available to high school students eligible to take college courses.
5. Increase internship opportunities in coordination with Friends of Lakeside Lab and other groups.

Academic Programs

The Strategic Planning Committee adopted the following Statement of Curricular Philosophy: "All undergraduate academic courses and outreach programs offered at ILLRRC will take advantage of the immersion learning opportunity available on site and in the surrounding natural ecosystems. All courses will seek to use an inquiry-based approach incorporating the scientific process and emphasizing the study of 'nature in nature'."

Academic courses offered to students at the university or college level at ILLRRC are the *raison d'être* of Lakeside's establishment and continue to be a core component of ILLRRC's mission; they must inform our partnerships with the community and other organizations. The success of these academic programs is linked to the success of research programs because students are attracted by both the quality of the faculty and the nature of the courses. Committed faculty with Lakeside research programs are more likely to be attracted to teach at the Lab, will be more likely to bring students with them, and will help promote the Lab at their home institution. Therefore, implementation of recommendations for Academic Programs and Research should be simultaneous.

Academic programs have struggled to maintain enrollments. Lack of effective promotion of the ILL courses at the Regent universities and colleges is a major problem and present visibility of ILLRRC on the Regent campuses is low. Interactions between the ILLRRC administration and the various academic units at Regent institutions are sporadic, unproductive, and not likely to produce a vibrant academic (or research) program as envisioned in the new mission statement. The Strategic Planning Committee noted that incorporation of field-oriented, immersion courses such as offered by ILLRRC as a specific requirement for academic majors has only occurred in the Environmental Science major at SUI. In the University catalogues, Lakeside courses are scattered throughout large menus (e.g., Environmental Science) or they are mentioned as a group in a large menu (Biology). A number of improvements were suggested.

Academic Programs Recommendations:

1. Educate faculty and advisors in appropriate departments at Regent institutions about advantages/uniqueness of Lakeside courses.
2. Promote the ILLRRC courses directly to students in appropriate classes at Regent institutions and other colleges.
3. Promote the integration of field-oriented, immersion courses as a specific requirement into curricula at ISU and UNI.
4. Continue to diversify outreach programs with additional emphasis on offerings that cross-over between science and the arts.

Research Program

Research has been recognized as a cornerstone of Lakeside Lab's mission as emphasized in its long history at the Lab, as well as by statements in the 2006 Strategic Plan and subsequent annual reports. Noteworthy areas of successful research programs are the water monitoring program conducted by Waitt Hall (and the State Hygienic Lab) and the Diatom Lab which has a rich history with a national and international reputation. Other areas of research, such as prairie ecology, wetland ecology, and limnology, that have had a presence at the Lab in the past, are now largely lacking. Today, the Lab is used primarily by a few researchers as a result of their association with the Lab and a relatively small number of graduate students. Some of the previous documents have offered lists of hurdles to invigorating these other areas of research, while others have suggested ways to improve research productivity at the Lab. Unfortunately, no program to reinvigorate research has been created and executed. Research possibilities are not promoted at the Regent institutions and there is no effort to recruit researchers. Considerable discussion by this Committee and others has been devoted to the problems recruiting researchers and many potential solutions to these problems have been suggested.

Research Program Recommendations

1. Formalize research areas (e.g., Prairie Ecology, Wetland Ecology, Limnology, etc.) not now recognized or emphasized at ILLRRC (such as Water Quality and Diatoms) while simultaneously seeking funding from industries and national, state, and local agencies that benefit from sound, unbiased environmental information. An emphasis on reclamation and restoration of ecosystems and long-term ecological monitoring may be a useful starting approach. The Committee recognized that naming/branding research programs at ILLRRC is important, but did not reach a recommendation on naming research programs.
2. Determine the needs of researchers, particularly with respect to housing and the specifics of their research programs, with the goal of facilitating lab use by faculty, post-doctoral students, graduate students, and undergraduates for research purposes.
3. Pursue the creation of an information/data management portal for legacy data at ILLRRC and for new ecological data as it is created by monitoring and research programs.
4. Investigate mechanisms to incorporate modern molecular techniques into the research capabilities of ILLRRC. Such techniques can be powerful tools to monitor invasive species and should be incorporated into monitoring programs involving the public.
5. Increase programs featuring world-class scientific speakers to stimulate students and faculty intellectually and increase topical workshops to reconnect scientists and scientific information to the community.

Administration

Administration of ILL was envisioned historically as potentially either a one-person position (a possibility included in the 2004 Friends Business Plan) or a two-person position with a Director of Operations and Outreach and a Director of Academics and Research. Regardless, the many roles of the Executive Director(s) are crucial to the success of ILLRRC as envisioned in the new mission statement. An ideal single executive director should have the ability to 1) maintain the present outreach programs and create new ones, 2) promote and enhance academic activities, including creation of innovative courses and attraction of a diverse, vibrant faculty and student population, 3) stimulate research activities with creative programs to attract researchers, 4) maintain and promote positive interactions with the local community, and 5) assist in fund raising activities, and direct the maintenance and improvement of the ILLRRC facilities.

This set of professional abilities demands a person with unique qualifications including strong leadership skills, an established record of successful outreach activities, an outstanding record of original research, qualifications for an academic position in an existing department in a Regent institution, and an established record of fund raising in the scientific and public arenas. In addition, the Okoboji region should be the executive director's primary site of residence.

Given that a change in administrative structure will be a slow process, the Committee makes a long-term and a short-term recommendation.

Administration Long-term Recommendation (to be executed in the next 12 months)

Reclassify the Professional and Staff position from Academic Support to Administration, and redefine qualifications and requirements for the position.

Administration Short-term Recommendation (to be executed immediately)

Appoint an interim Director of Academics and Research to promote and enhance academic activities, and stimulate research activities.

The Strategic Planning Committee recognized that effective attainment of goals in the mission statement will be enhanced by advice from knowledgeable individuals at regular intervals. Therefore, the Committee made the following recommendation.

Create an Advisory Committee of members of the academic/administrative communities of SUI, UNI, and ISU, ILLRRC alumni, and members representing interested groups (e.g., Friends of Lakeside Lab).

The Strategic Planning Committee did not reach any conclusion about the viability of the current Curriculum Committee, although it was generally agreed that the functional role of this entity is dubious.

Charge to the Iowa Lakeside Laboratory Regents Resource Center Planning Committee

Over the past five years the Iowa Lakeside Laboratory Regents Resource Center has attained administrative and financial stability, and made important advances in some critical areas such as educational and scientific outreach programs. An assessment of progress with a strategic view toward positioning ILLRRC to make even greater contributions to the citizens of Iowa and the scientific community is now both timely and needed.

The Planning Committee shall assess progress and propose a strategic vision and goals to enhance each of the following:

1. Mission statement
2. Curricular program for undergraduate students
 - a. Curricular philosophy
 - b. Outcomes assessment instruments
3. Graduate program

4. Educational and scientific outreach programs
5. Research programs and potential research centers of excellence
6. Administrative structure
7. Usefulness of a potential ILLRRC Advisory Committee
8. Funding, marketing and promotion of ILLRRC

Iowa Lakeside Laboratory Background

- ◇ The Lakeside Laboratory campus, established in 1909, is a residential facility located on the shores of West Okoboji Lake. The campus, most of which is a nature preserve used as an outdoor classroom, includes more than 140 acres.
- ◇ From 1909 to 1936, the Laboratory was operated by the Iowa Lakeside Laboratory Association of the Alumni and Friends of the University of Iowa.
- ◇ In 1936, the Association deeded the property to the State of Iowa Executive Council under provision of the Trust Agreement of April 30, 1936. The agreement states that the Laboratory shall be used for “the accommodation, promotion, support, and maintenance of scientific studies and research in the field of biological sciences.”
- ◇ From 1936-47, the Laboratory was administered by a Board of Managers representing the State Conservation Commission (now DNR), the State Board of Education (now Board of Regents), Iowa Lakeside Association, the U.S. Fish and Wildlife Service, and the University of Iowa.
- ◇ In 1947, the Board of Regents assumed responsibility for the Laboratory. Since then, it has been run cooperatively by Iowa State University, the University of Iowa, and the University of Northern Iowa through the Board of Regents.
- ◇ In December 2004, the Board of Regents approved a Business Plan for the Laboratory which focused on increasing the availability of educational offerings, including providing year-round activities.
- ◇ Between 1997 and 2006, the credit enrollment at the Laboratory ranged from a high of 185 students in 1997 to a low of 83 students in 2005 and 2006. The lack of substantial scholarship and grant funds has prevented students and faculty from participating more fully at the Laboratory.

Expanded Lakeside Laboratory Functions

The Lakeside Laboratory Regents Resource Center encompasses the following functions which will be provided on a full-cost recovery basis.

- ◇ *Scientific Field Research.* The purpose of this function is to continue the Lakeside Laboratory as a field station that supports the science programs, including education, research, and outreach, of the Regent institutions and the Lakeside Consortium.



- ◇ *Lifelong Learning.* The purpose of this function is to provide needed learning opportunities to the citizens of northwest Iowa. The Center executive director will work with the programmatic and distance education administrators at each of the Regent universities to determine the need for programs/courses in northwest Iowa. The universities will provide the instruction and faculty. Other postsecondary institutions seeking to offer distance education courses at the Center will work through the Center executive director to ensure that there is no conflict of interest. Cultural offerings that support the liberal arts mission of the Regent universities will be provided as appropriate. Services that support the Regent universities' programs in social work, health, and



similar areas will be provided through the Center.

- ◆ *Entrepreneurship.* The purpose of this function is to expand the entrepreneurial educational opportunities for Regent university students. The Center executive director is responsible for working with the Regent universities to provide entrepreneurial workshops at the Center.



- ◆ *Economic Development.* The purpose of this function is to address the Board of Regents' role in economic development in partnership with the Iowa Department of Economic Development, the community college system, private colleges, local governments, and regional economic development organizations. This approach will create a model for cooperative rural economic development through educational opportunities and collaborations with other community resources that can be replicated throughout Iowa.



- ◆ *Community Involvement.* The purpose of this function is to obtain community support for the Center that will result in endowment funds for the long-term operation of the Center, including tuition and housing assistance for students, faculty research grants, housing assistance for faculty, and acquisition and maintenance of a specialized equipment pool. The immediate goal for the endowment is \$600,000.



The Okoboji Lakeside Laboratory

by Thomas H. Macbride

The following material has been drawn from Professor Macbride's article published in the *Proceedings of the Iowa Academy of Science* for 1909. It is an important article for the information it conveys about the new lakeside laboratory's purpose and Macbride's plans for it in the year of its creation.

The establishment of the Okoboji Lakeside Laboratory, founded by the alumni of the State University of Iowa, promises to affect so deeply the future scientific work of our state that some account of its beginning and especially its raison d'être may rightly claim the attention of the Academy. The laboratory has been located on the west shore of Lake Okoboji in Dickinson county for the reasons following:

In the first place the topography of Dickinson county is peculiar, unique. Situated on the western border of the Iowa Wisconsin drift, the region illustrates, as possibly no other equal area in the state, the special characteristics, not only of glacial moraines in general, but in particular the very expression of the Wisconsin moraine. In fact, I think that it must be admitted that the Okoboji lakes and their encompassing hills do indeed form the finest bit of morainic topography to be found on our

(Left) Thomas Huston Macbride, the dreamer whose tireless efforts sustained the laboratory in its first twenty-five years. Just two days before his death in 1934, he completed an article for the *Des Moines Register* describing the laboratory. His support of the research station continues, even from the grave. Recent bequests from his estate will be used in the fall of 1985 to enlarge the laboratory library, construction which will include "pillars [which will] shine among [the] trees . . ." (courtesy Iowa Lakeside Laboratory)

western prairie. . . .

Secondly, the region having Okoboji for its center is, by reason of the peculiar topography just mentioned, the field of a special floral display difficult to illustrate anywhere else within such narrow limits. We have a forest flora and a prairie flora; and neither in this part of the world has ever been adequately studied. It is believed that the fungal flora of the region, for instance, is especially rich and interesting. We have all kinds of habitat conditions, from aquatic to xerophytic. We have deep water, shallow water, but permanent; marshes, springs; and xerophytic [sic] slopes and hill-tops, some so dry as to offer home to the vegetation of the higher western semi-arid plains. The plankton of the lakes is filled with desmids and diatoms and all manner of algal flora, during July and August rich beyond comparison in all that makes up the tide of life for these simple but fascinating forms.

. . . the factors of ecology and distribution are all here, in large part so far, unexplored and certain to interest for centuries generation after generation of Iowa students.

For similar reasons, the fauna of the lake district will reward our constant study. The varied flora, just described, insures a varied fauna. The waters teem with animal life. Probably the protozoa of the whole valley will be found hiding on the vegetation of these [quiet] lakes and pools. Of course, the avian and vertebrate aquatic fauna are rich, and even the terrestrial vertebrates are likely to prove more than commonly worthy of investigation. While this is writing the papers tell of a mountain lion shot in one of the near-by marshy lakes! It is not believed that carnivores of size are likely to abound, not to such extent at least as to warrant a future visit from our nimrodic ex-president, but it is believed that natural science, in all its branches, entomology, ostracology, ornithology, will be greatly enriched by using such opportunity for research as Okoboji may afford.