

Lakeside News

Iowa Lakeside Laboratory



Summer 2004

Changes at Lakeside

By: Cory Peterson, Interim Director

Summer has flown by and I feel like I've been flying since May – between two offices, that is. I was the Dickinson County Extension Education Director and a Friends of Lakeside Lab board member, when Arnold van der Valk announced his resignation. At that time, the Board of Regents invited ISU Extension to contract with them and their coordinating committee for Lakeside Lab, to provide temporary management and oversight of Lakeside and to assist in developing a business plan for the future operations of Iowa Lakeside Laboratory. I continue to serve as a Friends board member and am maintaining 50 percent of my position at the extension office in Spirit Lake, as I assume the position of a half-time Interim Director at Iowa Lakeside Laboratory.

Cory Peterson, Dickinson County ISU Extension Education Director was selected as the interim director of Lakeside Lab.



Early this summer I took a crash course on what Lakeside is all about from Mark, Judy, Jane, students and professors. And, as happens with everyone who spends any time at Lakeside, I also learned a great deal about prairies, wetlands and the animals that call them home.

In June we were pleased to host the Board of Regents meeting, an event that required a great deal of logistical as well as social planning. Many thanks to the Wehrspann's and the Friends of Lakeside Lab for making the event a successful one!

July was a windy month here at Lakeside, although not like one would think. The Flying Cloud wind energy turbine ceremony was held at Lakeside, and we were honored to have Governor Vilsack attend. Sponsors included PPM Energy, Clipper Wind Power, Alliant Energy, The Corridor of Opportunity and ISU Extension. Many thanks go out to Dickinson County 4-H'ers, Milford Kiwanians, the

Wehrspann's and Lakeside staff for helping make the event a success.

There continues to be a steady hum of activity lingering above the tree tops at Lakeside. Soon scheduled academic courses will draw to a close and I will spend the majority of my time overseeing the creation of the business, organizational, fundraising and administrative plan for Lakeside Lab. Ideas shared by community members, Friends of Lakeside Lab, faculty, students, staff and others will be incorporated into the plan. It's exciting to dream, along with others, a new vision for Lakeside Lab!

While I feel like I have learned a great deal about Lakeside the teaching facility and Lakeside the business, I know I have only uncovered a small portion of the whole. With the support of the Regent Universities, faculty, staff, students, Friends of Lakeside Lab and

others, Lakeside will continue to be an asset to the state of Iowa, the local community and students.

I am excited to help make Lakeside a better, more productive institution. I want to hear your suggestions and comments and will answer any questions to the best of my ability. Stop on by! My door is always open.

- Cory

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Friends of Lakeside Hire Director

By: Jane Shuttleworth, Friends of Lakeside Lab Executive Director

What an exciting time this is for Lakeside Lab, and how lucky I feel to be a part of it! Last May, Cory Peterson was hired as Lakeside Interim Director with the charge of creating an updated business and operational plan for Lakeside. At the same time, I was hired as the first executive director of the Friends of Lakeside Lab, Inc. My duties include continuing the public outreach work I conducted in the past as an ISU/Lakeside employee but especially to assist the Friends board in its fundraising and operational efforts. It is an honor for me to be selected for this position from a pool of very qualified candidates and a pleasure to work with the energetic and talented Friends board. Finally, it is a privilege for me to be in daily contact with the wonderful learning environment at Lakeside and the students, professors and staff.

Professors say 2004 has been a summer of exceptional students, and the students ask me “How does Lakeside get so many outstanding professors?” In addition, and under Cory’s leadership, the 2004 summer has brought a new level of communication and relationship building between the Friends board and Lakeside faculty, resident managers Mark and Judy Wehrspann, and regent administrators in regard to Lakeside’s future. From student recruitment to curriculum design, from plumbing to insurance policies, from tuition to grounds and building maintenance, the complex array of line items that funds Lakeside operations and scholarship has been dusted off, polished, diagnosed and discussed. Lakeside’s existing strengths – such as being an international center of diatom research, wetland and prairie restoration and conservation biology, have been touted.

And of course there is the quality of learning and teaching that takes place here. All these discussions are feeding into an outline for Lakeside’s future growth and expansion, and they will continue throughout the fall and also include community groups and members. There is talk of a year around directorship and programming, including academic, K-12 and community programming. Donors have been contacting us about how they can support these plans. Yes, this is an exciting time!

The summer began with Lakeside’s hosting of the Iowa Board of Regents for their monthly meeting. The Friends took this opportunity to provide the Regents, provosts and university presidents with a tour of the Lab grounds, including class visits with students and professors, followed by a reception and dinner that included speeches by Friends board members about the history of both Lakeside and Friends, and the important commitments Friends made to the Regents to demonstrate their support for Lakeside. We now have the renewed and revitalized attention of these distinguished decision makers, and we look forward to their support for the business plan to be completed by November and approved by the Regents in December. In the meantime, the Friends is updating and working on their fund raising plan to be included as part of that package.

And speaking of fundraising, it was a banner year for the Annual Friends of Lakeside Lab Golf Tournament. This year the tournament generated a record of over \$30,000. The tournament was also held in honor of the memory of Bill Reichardt, who co-hosted the tournament with Randy Duncan the past two years. Hats off to tournament chair Greg Drees for his hard work



Jane Shuttleworth was chosen to lead the Friends of Lakeside Lab, Inc. as their executive director.

and the courage to take over the leadership of this event from its founder, Hank Miguel. Thanks also to Greg for inviting Jeff Vonk, Director of the Iowa Natural Department of Natural Resources, to participate in this event. It was music to my ears at the dinner held afterwards to listen to Director Vonk publicly recognize the contribution that Lakeside’s water quality research and monitoring is making towards a better-informed water policy for Iowa.



2004 Golf Classic is Another Success

By: Greg Drees, 2004 Golf Classic chair

The third annual Friends of Lakeside Lab Golf Classic was held on a bright, blessed day at Brooks Golf Club on July 18.

Twenty foursomes teed it up to raise money for Friends, and others joined the players after the tournament for dinner and a silent auction.

Host Randy Duncan led the way onto the beautiful Brooks layout with such participants as DNR director Jeff Vonk, playing the tourney in memory of the late Bill Reichardt.

Although the final figures aren't yet in, we can say with certainty that the event was a financial success for Friends, raising money and awareness to endow the future of the Iowa Great Lakes.

Suffice it here to say that the Iowa Great Lakes community stepped up in a very generous way to make this annual fundraiser a fun and profitable event.

The preservation of clean water in this beloved environment is essential to our quality of life. We hold in highest esteem all the persons and businesses who deem Friends as an integral part of the effort to pass on the integrity of our resources to future generations.

The revenue raised by the tournament will be used for water quality monitoring and research, field-based learning opportunities, public outreach programming and forming partnerships with other organizations for clean water projects.

To all the golfers, sponsors, donors and others who helped fashion this celebration for clean waters, we extend our grateful thanks.

Board of Regents Visit

Lakeside was buzzing with excitement in June. The Board of Regents held their monthly meeting at Iowa Lakeside Laboratory on June 15th and 16th.

Also present at the meeting were the presidents and provosts for Iowa State University, the University of Iowa and the University of Northern Iowa in addition to the superintendents for the Iowa School for the Deaf and the Iowa Braille and Sight Saving School.

The Friends of Lakeside Lab planned a tour of Lakeside Laboratory's facilities as well as a boat tour and cocktail hour. The dinner was sponsored by the Friends of Lakeside Lab and Regent Sue Nieland.

Unfortunately the boat tour was eliminated because of a brief delay in the schedule. The cocktail hour and tour of Lakeside were

combined in order to save time, so the guests sipped their beverages while they toured the facilities.

First term students were found working in each of the labs, giving the guests a better look at life at Lakeside.

The cocktail hour finished at the Waitt Water Quality Lab classroom where an appetizer adorned tackle box awaited the guests.

The Regents and the university presidents and provosts were inducted into the University of Okoboji.

Dinner was served in the Waitt Lab foyer.

There was a lot of discussion and a great deal of laughter echoing through Waitt Lab that evening.

It was an excellent opportunity to showcase Iowa Lakeside Laboratory and all of the great things going on here.

Now the Board of Regents as well as the Regent institutions have a better idea of what amazing resources are held at Iowa Lakeside Laboratory.

The Board of Regents sessions wrapped up Wednesday, June 16th, by approving a two percent salary increase for the university presidents.



Summer Water Quality Research

By: Steve Fisher

We are on our final year of a grant to develop nutrient (Nitrogen and Phosphorous) budgets for West Lake Okoboji, East Lake Okoboji and Lower Gar Lake.

Quantifying nutrient inputs to these lakes requires developing an annual water and nutrient budget for each lake. These budgets include 1) surface flow and mass of nutrients of the flow from lakes upstream of the lake, 2) the volume of water and mass of nutrients entering the lakes from their subwatersheds, 3) precipitation volumes and mass of nutrients in wet and dry deposition entering the lakes directly, 4) lake evaporation rates and 5) internal loading, especially for P.

1) Surface flow and mass of nutrients of the flow from lakes upstream of the lake It is assumed that surface flows into and out of the lakes dominate lake water budgets. We will be measuring the cross-sections of the channels connecting the various lakes (needed to calculate the volume of water leaving each lake) and estimating flow rates in these channels at different water levels in the lakes. The USGS has a water level monitoring station at Iowa Lakeside Laboratory that is used to monitor water levels in the lakes. Data from this station will be used to develop water budgets for the lakes. Outflow measurements at the dam on Lower Gar Lake will be taken whenever there is sufficient rainfall to cause prolonged flow over the dam. The mass of nutrients entering or leaving the lakes by inflow and outflow can be calculated using the flow volumes and CLAMP nutrient concentrations of the lakes. Although groundwater flows are undoubtedly occurring, it is unlikely that they are major

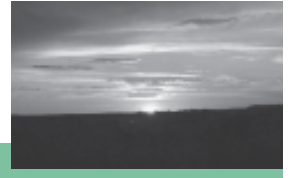
contributors to nutrient inputs into any of the lakes. In any case, if groundwater flows prove to be a significant component of the water budget, which is most likely for West Lake Okoboji, this should be evident from a comparison of annual surface inflows and outflows.

2) The volume of water and mass of nutrients entering the lakes from their subwatersheds We have installed autosamplers on selected subwatersheds. These instruments record stream velocity and depth every 5 minutes and take a water sample every 6 hours. Daily stream flows and daily masses of nutrients in the stream flow can be calculated using the velocity and depth data and the concentration of nutrients in the water sample. Five autosamplers are currently logging data and taking samples on the subwatersheds of the 3 lakes – 1 site on West Lake Okoboji, 2 sites on East Lake Okoboji and 2 sites on Lower Gar Lake.

3) Precipitation volumes and mass of nutrients in wet and dry deposition entering the lakes directly Atmospheric deposition of nutrients occurs in both wet and dry deposition. Wet deposition includes rain and snow while dry deposition is deposition of particles from the air. Wet and dry deposition is measured using a wet-dry precipitation collector. This instrument has 2 buckets – one collects wet deposition and the other collects dry deposition. When it is raining or snowing the dry bucket is covered and the wet bucket is uncovered. When it is not raining or snowing, the dry bucket is uncovered and the wet bucket is covered. The wet and dry buckets are sampled on a weekly basis. The mass of nutrients entering

the lakes directly in the form of snow or rain can be calculated from the nutrient concentration of the sample and the amount of precipitation associated with the sample. The mass of nutrients entering the lakes directly in the form of dry precipitation can be calculated from the nutrient concentration of the sample and the cross-sectional area of the bucket.

4) Lake evaporation rates To quantify the water budget of the lakes a good understanding of water evaporation from the lakes is needed. The most common way to measure evaporation is using a Class A evaporation pan. Since there were no weather stations in the vicinity of the Iowa Great Lakes that collected pan



evaporation data, a class A evaporation pan was installed at Iowa Lakeside Laboratory. Evaporation pan levels are recorded every 6 hours and from this data daily evaporation rates can be calculated. From these daily pan evaporation rates individual lake evaporation rates can be estimated. So far this year the greatest pan evaporation rate was close to 0.5 inches in a day.

5) Internal loading, especially for P The amount of nitrogen and phosphorus entering the water column from the sediment dependent on the nutrient diffusion rate in the consolidated sediment. To estimate this rate, sediment cores (48 cm in length) are taken and sectioned into 2 cm portions and the pore water

in each portion is extracted by centrifugation. The extracted pore water is analyzed for nitrogen and phosphorus. Nutrient profiles of the sediment cores are generated using the differing nutrient concentrations at the different sectional depths. Nutrient loading from the lake sediment can be estimated using the profile of the sediment core. To estimate these rates in Lower Gar Lake and East Lake Okoboji, sediment cores were collected in five locations in both lakes in June and again in July. We are ready to begin our August coring.

Later this year, after analyzing all the gathered data, we should be able to construct nutrient budgets for West and East Okoboji Lake and Lower Gar Lake.

These modeled budgets should help local communities and their leaders make rational decisions on how best to manage the lake watersheds to reduce nutrient inputs in order to improve lake water quality.

No Polar Bears in 2004

By: Diana Horton, professor Ecosystems of North America

A second group of four enterprising students made the trip to Churchill in 2004.

Churchill has 800 inhabitants and is located on the west shore of Hudson Bay. It is accessible only by train or plane. We drove approximately 1,000 miles due north of Lakeside Lab to Thompson, Manitoba and boarded the train there.

With the train averaging 30 mph, it takes 15 hours to travel overnight through approximately 500 miles of wilderness to Churchill.

We stayed at the Churchill Northern Studies Centre, which is situated on a Cold War era rocket launch site, complete with abandoned launch pads!

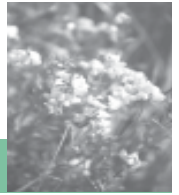
The landscape at Churchill is rugged, dominated by massive outcrops of beautiful grey, fine-grained Precambrian rock. Continental glaciers were centered near Churchill during the most recent glacial period, so there are fascinating glacial landforms – for example, winding, rocky

ridges deposited by rivers running beneath the glaciers. Additionally, this area is well within the zone of permanently frozen ground, so permafrost features – for example, ice-cored mounds up to three or four feet tall – are prevalent.

There also is an amazing diversity of virtually pristine, natural habitats at Churchill. Along the coast of Hudson Bay, there are sandy beaches, salt marshes in low-lying sites that are inundated by the tides, and freshwater pools perched in the rocks high above the Bay. Inland, there is low shrub tundra with scattered spruce trees that are ‘flagged’; that is, the branches on the windward side of the trunk are sheared off, leaving a line of branches (the ‘flag’) on the leeward side. Flagging is testimony to fierce abrasion by windblown ice crystals in winter. On dry, rocky ridges, there is lichen-dominated tundra and open coniferous forest in protected sites. Farther inland still, the landscape levels out into the Hudson Bay

Lowlands, an unimaginable expanse – thousands of square miles - of muskeg, the colloquial term for peat bogs.

The focus of the Ecosystems class is plants and plant-like organisms – flowering plants, conifers, ferns, mosses and liverworts, and lichens, but we also enjoyed seeing beluga whales (hundreds! in the mouth of the Churchill River), loons, bald eagles, ptarmigan (arctic



The Wehrspann Report 1979-2004 25 Years at Lakeside

By: Mark and Judy Wehrspann

As summer dwindles we sit on the porch and reflect on the past 6 months. Our thoughts dipped, soared and teetered between hope and guarded concern.

Financial shortfalls in the state leading to reductions in funding for Lakeside. Lakeside director announces he will serve no longer. Perceived lack of communication regarding Lakeside at all levels. None of present regents have ever been to Lakeside. None of university provosts have been to Lakeside. All of the above can lead to perception and many times negative thought.

But there will be classes at Lakeside in 2004. The months prior to the beginning of the session move quickly as all units are cleaned before faculty, staff and students arrive for the summer. It takes many helpers to get Lakeside ready, and we thank our local ladies, JoLean Wintz, Milford, Karen Halbur, Arnolds Park, Doris Griemann, Spirit Lake, and Arlene Baedke, Terril. We also appreciate the help of Harlan Christensen, Spirit Lake prior to, during and after summer sessions. His willingness to volunteer his time and talents was laudable when funds were not available. While we are

mentioning staff, we must include Dianna Isder, Ocheyedan, our new head cook. She did an outstanding job dealing with our Lakeside Family. With Dianna, arrived Sandy Vande Hoef, Harris, who along

grouse), and geese. We also saw lemmings and amazing numbers of wood frogs! Of course, biting insects, including black flies, mosquitos (affectionately designated 'mozzies' by one member of the party) and horse flies, are a 'noteworthy' feature of the environment, but our net bug jackets were effective at keeping them at bay.

We went up a month earlier than in 2003, and arrived to find Hudson Bay still covered with ice. That sight alone was the experience of a lifetime!

We watched day-by-day as the giant pans of ice and mini-icebergs shifted along the shore, with some left stranded and melting on the rocks, and most eventually blown out of sight across the Bay as the wind shifted.

From the day we arrived, we were treated to a display of a profusion of wildflowers. Among the most spectacular of these were the dwarf rhododendrons that splashed patches of tundra with brilliant magenta, followed by a carpet of cream-coloured blossoms of the rose-like arctic dryad. We watched a magnificent, pale-coloured wolf trotting across a peat bog, and occasionally sighted sandhill cranes, the size and colour

of small deer.

We took a week to travel by van between Lakeside Lab and Thompson, camping along the way in provincial parks and campgrounds, and in unofficial sites wherever we could get off the road. The thousand mile north-south transect between those two points begins in the tallgrass prairie region of northwestern Iowa and the eastern edge of the Dakotas. Historically, the northern edge of this biome extended into southeastern Manitoba, where we were fortunate to examine a fabulous preserve comprised of more than ten square miles of land. Here, the landscape is a mosaic of prairie and patches of stunted trees, mainly trembling aspen and 'our' bur oaks (here on the northern edge of their range). The patches of trees are increasingly extensive northward. Eventually, the bur oaks are 'replaced' by spruce trees and the Boreal Forest closes in across the landscape. We examined a fascinating variety of Boreal Forest habitats, including moss-carpeted spruce forest; rocky, lichen-dominated jack pine forest; densely shrubby trembling aspen forest; and scattered, wild lakes with rocky shorelines. Fire maintains Boreal Forest and we saw many sites in

different stages of regeneration after natural fires ignited by lightening.

Luckily, bears are less common in the summer months. Nevertheless, everywhere we went, we were accompanied by a 'bear guard' with a high-powered rifle. In 2003, we did see bears just a couple of days before we left. We didn't see bears, but given the unpredictable nature of these 1,000 pound-plus animals, no one voiced any complaints!



with Arlene and Karen Halbur, handled all our summer meal preparations. Helpers with clean up in the Mess Hall included DeLila Johnson of Milford, Tessa Vande Hoef of Harris and Karen.

The directorship change brought concern and then relief. We thank Arnold van der Valk for the leadership provided in the past 9 years. Cory Peterson has stepped into the Interim Directorship with both feet running. Her daily presence has provided faculty, staff and students with open office access. We personally thank her for keeping us in the loop of information and for her guidance during this period of unknowns.

This summer brought the State Board of Regents in June. The help received by Jaynse Belden in the ISU President's office was a difference maker for us. The Friends' once again outdid themselves providing hospitality to the Regents. This continuous and generous support gives us indeterminable release from worry. We can't thank the Friends people enough for their support, and we can't find the words sufficient to thank the Friends board members for their undying belief and action in the mission of Lakeside.

In July we hosted dedication ceremonies of the Flying Cloud Wind Turbine farm. The day began early with local Kiwanis members from Milford helping Mark with traffic control. Our students and faculty graciously moved vehicles and class time off campus while 200 cars were parked and approximately 350 people arrived for the day. A catered breakfast served to invited guests in our Mess Hall was followed on the lakeside slope with the formal dedication ceremonies. Governor Vilsack spoke as well as dignitaries from ownership and management entities. After the dedication, area transit buses loaded up the attendees and shuttled them to the turbine site for a

closer inspection. By 3:00 pm the day's events were history and Lakeside resumed its quiet serene normalcy. It was a great day for Lakeside; as well as a great day for wind energy!

Speaking of wind energy (sic), the faculty this summer has been most complimentary of the caliber of students and their interest in the specific courses taught. It has been refreshing for all involved. This summer our international presence was enhanced with the arrival of two young women from Croatia – one in the Freshwater Algae course and one in the Diatom course. Both enjoyed their stay with us and received firm foundations in their areas of study. This year's courses also brought students from Canada, Mississippi, Ohio, New York, Pennsylvania, Illinois, Minnesota, Colorado, Nebraska and Florida. What a privilege we have showing them the station and the excellent quality and quantity of teaching that is experienced during their tenure.

Mahan Hall and Macbride renovations are almost complete. The back porch of the library has been renovated for additional faculty/student use. The small white cottages that remain on the north village green will be sided with new cedar this fall to give them a long overdue facelift!

Mark continues to serve as Tech One of the Lakeside's wired/wireless network which he created, managed and trouble shoots. When working well, which it usually does, the job is rewarding. Down time is minimal but is amplified when other people are here utilizing the resource and come to expect it as an integral part of their life.

It would be appropriate to bid farewell to Bob Barak, longtime friend of Lakeside and liaison between the Lakeside and the Regents Office. As he enters retirement later this year, Bob has been a true friend over the years and has been very open in his desire to

see Lakeside succeed. "Thanks for the memories", Bob!

Until the next Wehrspann Report, we continue to do our work here at the lab and dream about those who walked the paths, slept in the beds and ate the meals with us. You may be absent physically, but in our minds we see people in action.

There will always be much to do and goals to reach as we explore new ways of making this possible. With your support and devotion to this station, Iowa Lakeside Laboratory will continue to serve Iowans and others as a place to 'go out from and study nature in nature'. Our job is to facilitate that mission, and it is our joy and privilege.

Mark and Judy, at home at the Lab

In Memoriam: John Clayton Kingston (1949 -2004)

By: Eugene F. Stoermer and John P. Smol

John Kingston was born September 26, 1949 in Austin, Minnesota and died from the effects of a brain tumor in Ely, Minnesota on June 9, 2004.

John obtained his B. S. in Botany from Iowa State University in 1970, his M.S. from the University of Delaware in 1975, and his Ph. D. from Bowling Green State University in 1980.

John's first and abiding interest was the natural history, particularly the taxonomy, of diatoms. His interest in natural history was sparked by his boyhood exposure to nature, and he remained an avid outdoorsman for his entire life.

His interest in diatoms was developed primarily by interactions with Dr. John D. Dodd.

As an undergraduate, John particularly enjoyed the opportunities and atmosphere of Iowa Lakeside Laboratory. He took the Laboratory's diatom class, taught by Dr. C. W. Reimer, in 1969, and then returned as an honors research student in 1970, and continued to return as a research investigator and guest scientist on numerous occasions.

The degree to which the research opportunities and collegial interactions provided by Lakeside Lab affected John's career is reflected by the fact that he requested his ashes be returned there.

During his graduate studies he met Sarah Rayman, the "little" sister of a close friend. They married in 1976. The union produced two sons, O'Neil and Hudson who, together with Sarah, survive.

John undertook post-doctoral research at the University of Minnesota's Limnological Research Center (LRC), under the direction of Dr. Herb Wright.

John's first professional position was leadership of the group at the University of



Minnesota at Duluth called Paleoecological Investigations of Recent Lake acidification (PIRLA).

At the conclusion of the PIRLA project John became a research scientist at PEARL where he was instrumental in bringing the tools of diatom-based ecological reconstructions to a number of topics. This was probably the most productive period of his career in terms of publications.

John became an environmental manager with the Canadian provincial government of Newfoundland. The "one job per family" philosophy limited possibilities for Sarah, and drove John to seek other opportunities.

He accepted a position with the United States Geological Survey National Water Quality Assessment Program (NAWQA). In theory this should have been an ideal position for John. The NAWQA program samples many largely unexplored habitats in poorly known, at least so far as the diatom flora is concerned, parts of North America.

John's final position was at the Center For Water and the Environment, Natural Resources Research Institute, University of Minnesota - Duluth. This position allowed John more latitude to pursue research and allowed him to investigate problems of his favorite research topics.

These dreams were cut short by his terminal disease. Personally, he was a genuine "frontier liberal academic", a type more commonly encountered in previous generations. Social and academic graces were not his main concerns, but he was generous and honest almost to a fault. He was patient and thorough with students and beginners, either in person or through correspondence, and perhaps his most lasting legacy will be found in those he helped as beginners to the field of diatom taxonomy, as well as paleolimnology.

John's incisive intellect and dry humor will be sorely missed by those fortunate enough to know him well, and by the rest of our research community denied this opportunity by fate.



Flying Cloud Dedication

By: Tracy Tucker, Public Relations Intern

The dedication of the Flying Cloud wind energy site located east of Lake Park, Iowa on Highway 9 was held at Iowa Lakeside Laboratory July 21, 2004.

The community-based dedication of Flying Cloud included a value-added agriculture breakfast, turbine tours and lots of learning opportunities at the Iowa Lakeside Laboratory on the shores of West Okoboji Lake. Students from Iowa State University, the University of Iowa and the University of Northern Iowa have learned about the region’s unique plants and animals at this biological field station since 1909.

“We were excited to have the Flying Cloud Dedication at Lakeside,” said Iowa Lakeside Laboratory Interim Director Cory Peterson. “It was a terrific opportunity to educate the public about wind energy by providing hands on learning, which is what Iowa Lakeside Lab is all about.”

The U.S. Department of Energy’s National Renewable Energy Laboratory’s outreach van displayed the nation’s latest wind research alongside local fourth graders Keith Byers and Drew Brevick, who shared their findings on the effects of wind on balloons in moving their toys.

Dedication attendees received T-shirts featuring the artwork of Katelyn Warburton, the 13-year-old daughter of Flying Cloud landowners.

“It’s important to recognize the economic, educational and environmental benefits that our wind provides,” said Lake Park Mayor Ann Ditsworth. “Flying Cloud supplies energy to Iowa without adverse impact on our local agricultural and water resources.”

Wind energy provides direct economic benefits to both farm families and



The official ribbon cutting ceremony for the Flying Cloud Wind Farm site. Governor Vilsack was present to cut the ribbon.

communities. Lease payments provide added income to farmers while leaving most of the land still available for growing crops.

The addition to local property tax bases boosts schools. Taxes from the \$50 million Flying Cloud wind farm flow to the Harris-Lake Park Community School District and the Okoboji School District.

The 44-megawatt Flying Cloud Wind Power Plant is expected to produce enough clean, wind energy to annually power about 20,000 average Iowa homes.

Power generated by Flying Cloud is delivered into a long-term agreement to

Interstate Power & Light Company, a wholly-owned subsidiary of Alliant Energy. The project is owned by PPM Energy, was developed by Clipper Windpower and is operated by GE Energy.



A child participates in the Winderful Kidz Activity Center at the Flying Cloud Dedication.

Winderful Kidz Activity Center

The Winderful Kidz Activity Center kept children entertained from 11 a.m. to 2 p.m. Face painting, wind sock making and other activities were the highlight of the activity center.

The poster contest entrants were on display and the winning design created by Katelyn Warburton was put on t-shirts handed out at the event.

Friends of Lakeside Lab, Inc.

Friends was established in 1994 to provide local input into the research and educational programs of Iowa Lakeside Laboratory, to raise money for student scholarships, public programs and upgrading Laboratory facilities and to provide moral support.

All membership fees will be used either for student scholarships or to expand and improve public programs.

Name: _____

Address: _____

Phone: () _____

Please make checks payable to:
Friends of Lakeside Lab, Inc.
1838 Highway 86
Milford, IA 51351-7267

Friendship Categories

Friend:	\$25
Friendly Family:	\$35
Good Friend:	\$100
Best Friend:	\$_____

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