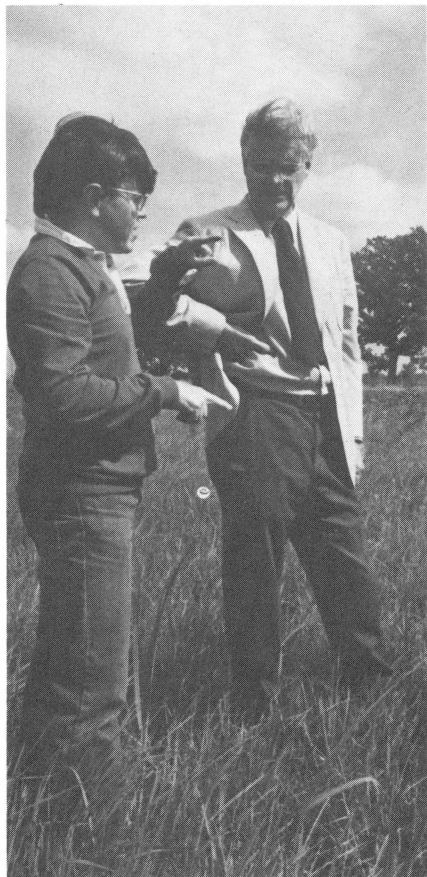


July 8, 1982

FERMI NATIONAL ACCELERATOR LABORATORY

FermiNews

PRAIRIE PROJECT TAKES STEP BACKWARD



Robert Wilson, Director Emeritus and the original stimulus behind the Fermilab prairie restoration, watches Tony Donaldson (left), former Prairie Committee chairman, gesticulate about the height of the prairie grasses in the Main Ring on a recent June visit compared to the 6 to 8 feet height of big bluestem grass in September (photo on right).

Big bluestem is one of the most important and tallest of the prairie grasses and the species is well represented in the Main-Ring plantings.



by Steve Bracker

The Fermilab Prairie Project took another big step backward last year. Sixty more acres of land inside the Main Ring were started on their way back to prairie, the community of grasses, wildflowers, and animals that flourished here before European settlement began. Over half of the land in the Main Ring has been planted in prairie grass already; in just three or four years prairie grasses will have "recaptured the ground" throughout the Main Ring.

Prairie grasses are amazing plants. If you visit the prairie in August or September, you will understand why the pioneers were impressed as they tried to wind their way through thick stands of big bluestem grass and Indian grass towering over their heads. Prairie grasses are also tough plants; they do well against weedy competitors, weakening them and driving

them out. They also produce lots of fuel for roaring prairie fires which stimulate prairie plants but stunt and kill most weedy annuals, trees, and brush.

But prairie is more than just grasses. Prairies in this area probably had about 150 species of wildflowers. In the spring, the prairie violet and the shooting star carpeted the ground. A bit later, spiderworts, cream wild indigos, wild quinines, and purple coneflowers bloom. As fall approaches and the grasses tower overhead, the prairie docks and compass plants, with their bright yellow flowers at the top of ten- or twelve-foot stalks, will be visible even above the grasses. Finally, late in the fall, gentians and other late bloomers appear.

A few vigorous wildflowers are planted alongside the grasses. They too are hardy and thrive against weeds. Many other prairie plants are more finicky about —————→



(cont'd. from pg. 1)

where they will grow; they do well only after the basic prairie matrix is already established. Each year additional wildflowers are planted. Some seeds are scratched into open areas, some are grown into young plants in greenhouse flats and transplanted. Some species do well; some are notoriously hard to start.

If you visit the prairie during June and early July, before the grasses have grown so tall that they obscure everything else, you can see over twenty kinds of prairie wildflowers growing in the earliest prairie planting which was sowed in 1975. Later plots have fewer species; prairie plants are almost all perennials and may take years to bloom. Last year's planting looks like a catalog of horrible weeds, but underneath, the prairie plants are emerging. In a few years, they will vanquish the weeds and furnish a prairie-like environment into which more species can be added. Every year we make an effort to improve every plot. It's a long road backward to a fully restored prairie.

Plants are only part of the story; the prairie also had its own animals. Some return by themselves as the habitat becomes more like prairie; several kinds of birds have become much more common in recent years, and some prairie insects are showing up. Some animals, almost extinct in this area through excessive hunting and destruction of living space, must be reintroduced. There are now trumpeter swans in the marshes inside the prairie; these birds are captive, but their young will be free-flying wild birds.

As the years have passed, new planting techniques have been tried. Some have been successful, others have failed. We are still studying the best methods to use in restoring such enormous areas. Some areas are thoroughly plowed and disked; in others minimal tillage or none at all is being tried. Some planting has been done with a modified grain drill, some with a hydroseeder, and some using the salt spreader used for salting Fermilab roads in the winter. One thing that remains constant is our need for volunteers to pick wildflower seeds, plant them in our plots, and help with the combining and planting of grass seed in the fall.

The best way to get a feeling for the Fermilab prairie is surely a visit; any prairie committee member will be glad to give you a guided tour. Visitors should be warned of prairie fever, an incurable progressive disease that afflicts even an occasional casual visitor. Symptoms are various sorts of seemingly bizarre behavior--incessant plucking of dried seed heads, searching for rare plants in old cemeteries and along railroad tracks, planting funny-looking seeds in big open fields, and walking around through prairie tracts talking in a strange mixture of English and Latin. It's a great disease once you get used to it!

IT'S NOT THE END, IT'S ONLY THE BEGINNING!

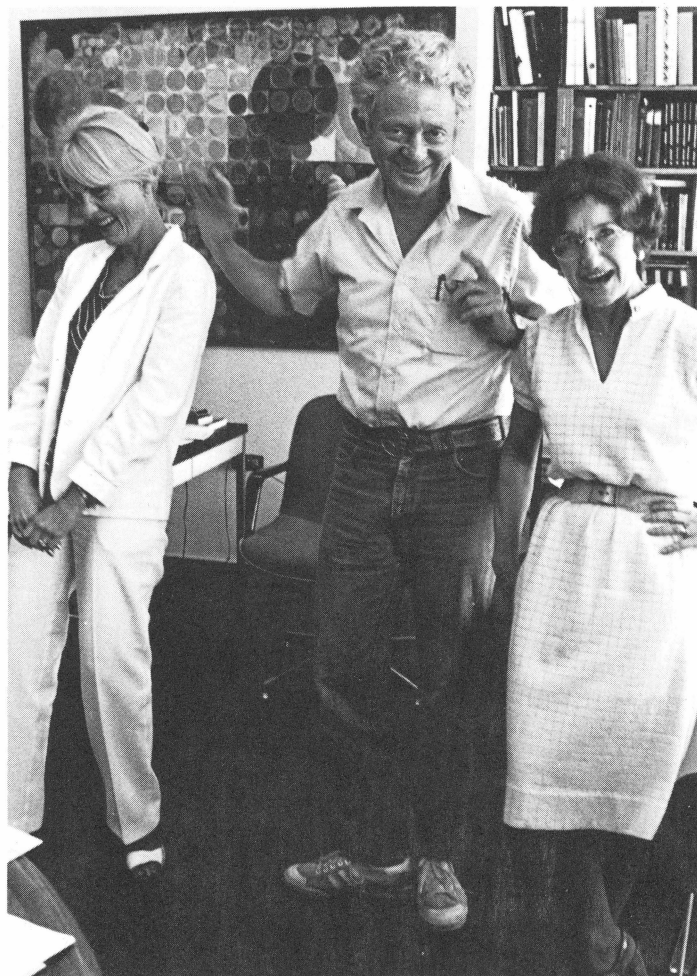
by Rene Donaldson

If Leon Lederman looks happy to be pushing Judy Ward out of his office and welcoming Eva Ritter-Walker, he is! He'll tell you himself that it is the happiest occasion he's had since being inducted into the Army.

The shenanigans just prove that happiness means different things to different people, and to Judy Ward, who has been in the Director's Office since 1973, happiness is ending her alliance with Leon to marry her sweetheart Dennis Zielinski who is an oral surgeon with offices in Downers Grove and Bolingbrook. To Eva Ritter-Walker, however, happiness is taking Judy's place.

Eva comes to Fermilab and the St. Charles area from Ipswich, Massachusetts (30 miles north of Boston). She and her husband Ed both worked for the Massachusetts Institute of Technology, where Eva was the administrator for academic programs in the psychology department, and Ed, now working on human interface design and evaluation at Bell Laboratories in Naperville, was a principal research scientist who helped found the MIT Center for Cognitive Science.

Eva brings a unique combination of talents to her position in the Director's Office. Born in Germany, Eva is fluent in German and French, has seen nine MIT freshmen through their first year while a freshmen advisor, spent the early 1960s



Eva Ritter-Walker (right) looks askance as Director Leon Lederman playfully pushes Judy Ward out of his office and sends her off on a new adventure. Judy's last day at the Laboratory was June 30.

working for Institute Professor Norbert Wiener (the "father" of cybernetics), and the remaining years as right hand to Luke Teuber, the founder of MIT's psychology department.

Prior to leaving Ipswich, Eva and Ed restored a Victorian house designed by Stanford White. Of Ipswich, Eva says, "Ipswichites are an obstreperous lot--they had their revolution long before the rest of the country--Greeks, French, Poles--among a few remaining Yankees--I loved the diversity." It is for the reason of diversity (and international renown) that Eva was attracted to Fermilab and felt that her training and experience would be useful.

What can a Director do when one capable lovely lady leaves and another takes her place? SMILE!

BIKE SAFETY FILM RESCHEDULED

"Bicycling Safety on the Road," a film based on the Effective Cycling course being conducted at Fermilab will be shown at 11:30 a.m., noon, and 12:30 p.m., Monday, July 12 in Curia II. The Safety Section and Bicycle Committee encourage all bicyclists to attend.

Deadline For Fall Housing Approaches

July 23 is the deadline for receipt of reservations for fall on-site housing. Responses will be mailed out August 13. Starting dates for fall occupancy will begin the first week of September. For information, please call the Housing Office, ext. 3777.

LILY'S GUILF GETS "GROUNDS" GOAT

by Edythe Kline

Vic Kerkman, buffalo herdsman, has an unusual friend named Lily. Lily was born on Easter Sunday, 1981 (hence the name Lily) and is a little white kid (like in goat, not child). But what is really unusual about Lily is that she follows Vic around like a loyal dog. He says "sometimes she is a real pest." When Vic has to go out in the field with his truck, if he asks Lily, "Want to go for a ride?" Lily eagerly climbs in the truck, not needing a second invitation. Also Lily likes to visit Site 55, where Rich Kujath always seems to have a little time to spend with her!

If you happen to be driving on the site and on one of those rare occasions think you see a horned creature beside Vic in his truck and do a "double-double take," it's just Lily.

PTF APPLIES FOR GRANT

by Michelle Gleason

An application has been submitted to the National Cancer Institute (NCI) for a grant to construct and operate a Proton Therapy Facility. This facility would use 200-MeV protons from the linear accelerator. The 200-MeV beam would be shared among high-energy physics, the present Neutron Therapy Facility, and the new Proton Therapy Facility.

If a grant is awarded, this will be the only facility in the United States having a highly penetrating proton beam (over 24 cm in soft tissue) and a neutron beam with a depth of half maximum dose of more than 16 cm. It has been shown in the past that sharing the beam between high-energy physics and medical research can be harmoniously done.

The principal investigator for both the neutron and the proton facilities would be Dr. Frank Hendrickson of the Presbyterian-St. Luke's Hospital, Rush Medical School. The co-principal investigator would be Dr. Lionel Cohen of the Michael Reese Medical Center.

The Neutron Therapy Facility at Fermilab has been treating patients for six years and benefiting from cooperation of local and distant radiation therapists as well as other medical specialists. The Neutron Therapy Facility was constructed during 1975 and 1976 with the assistance of many Fermilab volunteers. It is hoped that the same degree of cooperation will be extended to the new facility. In the best of all possible cases, the Proton Therapy Facility would begin treating patients in about two and a half years from now.

Fermilab is operated by Universities Research Association, Inc. under contract with the U. S. Department of Energy. Fermilab is published by the Publications Office, P. O. Box 500, Batavia, IL 60510, phone (312) 840-3278.



Lily and companion Vic Kerkman (missing from photo is Lily's friend, Rich Kujath).

CLASSIFIED ADS TO BE DISTRIBUTED WITH FERMINES JULY 8, 1982

FOR SALE:

CARS:

1979 CORVETTE. All options, low mileage, excellent condition; \$11,000. Call Jim, ext. 3371 from 8 a.m. to 4:30p.m., or after 5 p.m. at 815/729-9072.

1978 TOYOTA LAND CRUISER. Chrome wheels, oversized tires, stereo tapedeck, C.B. radio, walnut console, digital clock, New Holley carburetor and chrome headers, Ziebarted, excellent condition; \$4,995. Call Art Streccius, ext. 4791 or 896-8298.

1976 TRIUMPH TR7. Good condition, A/C, AM/FM/8-track, 4-speed, 38,000 miles, 35 mpg highway, 25 mpg city; wine red with saddle tan interior. Call Mike, ext. 4808, or after 5 p.m., 897-5870.

1976 FORD CAPRI. \$1,800. Call A. Buras, ext. 3752.

MISC:

1978 BLACK YAMAHA XS-400 MOTORCYCLE. Excellent condition with 2 new helmets; \$1,000. Call Gerald, 896-6229.

MURRAY MOPED. Up to 150 mpg, only 100 miles, perfect condition; \$400 firm. Call Gregg, ext. 4149 or 355-8158.

PIONEER SX-850 RECEIVER. Like new, in box, 65w/ch.; \$200. Call Mitch, ext. 4352.

MODEL SB 104 DIGITAL HAM TRANSCEIVER. \$550. Call Don Rohde, ext. 3721 or 896-4175.

GUILD F112 12-STRING GUITAR AND CASE. Best offer. Call Brian, 879-8812 or after 6 p.m., 879-2533.

A/M-F/M STEREO RADIO. Includes 8-Track/Cassette and 2 speakers; \$165. Call A. Buras, ext. 3752 or 879-5494.

ANTIQUES. Large beveled Victorian mirror (approx. 3 ft x 4 ft) with ornate, gilded frame and set-in base (perfect above mantle in large Victorian house), \$250; cherry sleighbed from the 1850s (originally from Salem, MA), 3/4-double size, \$275; chest of drawers in lt. cherry with mirror, ca. 1910, \$180; pair of semi-antique single bedspreads in beige, embroidered velvet, excellent condition, \$50 firm; tall pewter candlesticks, Art Deco, \$45. Call Eva, ext. 3211 or 584-8786.

TWO RAVINIA TICKETS. Saturday, July 24, 1982, 8:30 p.m., Chicago Symphony Orchestra - Berlioz: Overture to "Benvenuto Cellini," Beethoven: Piano Concerto No. 4, Strauss: Also Sprach Zarathustra. \$16 each. Call Judi Ward, 964-8012 or 852-5036.

FOR SALE:

MISC-cont.: SHEPHERD-COLLIE PUPPIES. Available Now, FREE. Call Thomas Larson, ext 4436 or 879-1123.

FURNITURE. Plush green sofa, \$75; matching swivel rocker and chair, \$25 each; brown swivel rocker, \$35; small writing desk, \$15. Call Don, ext. 3721 or 896-4175.

FENCING. Kennel hardware 6 ft×6 ft×12 ft cyclone fencing, posts, and gate, \$175. Call Jack, ext. 3630.

FREE SPIRIT BIKE. Girls, 24-in., 5-speed, excellent condition, \$45. Call Jack, ext. 3630.

SCHWINN BIKE. Girls, 20-in., blue, good condition, \$35. Call Rod, ext. 3428

TRUMPET. Bach Stradivarius, silver with leather case, 2 extra mouth pieces, mutes and cleaning equip., excellent condition; \$475-firm. Call Dave, ext. 4075 or after 5 p.m. 896-2439.

4-PC. MEDITERRANEAN BEDROOM SET. Triple dresser w/mirror, queen size head board & frame, chest of drawers, and night stand, good condition. \$250. Call Rod, ext. 3428.

HOUSEHOLD ITEMS. Swing set, \$18; 16-ft ladder, \$20; 3-speed electric fan, \$15; vacuum cleaner, \$20; twin-size head board and frame, \$35. Call A. Buras, ext. 3752 or 879-5494.

J. C. PENNEY COPPERTONE ELECTRIC RANGE. Fluorescent light, oven timer, clock, removable oven door, good condition, 30-inches wide; \$75. Call Jim, ext. 4073.

DELUXE 3-ROOM RABBIT HUTCH. 44w×49l×39h. Good Condition, \$30. Includes straw, alfalfa, and 50 lbs. rabbit pellets. Call Sue, ext. 4813 or 815/725-1258.