Chicago sludge to restore land

rters of Shawnee, on strip-ed land acquired by the federal rnment in 1966 and added to forest system.

the tab for an application of 51 illion gallons of liquid sludge to 81 cres. Shawnee officials are now otiating with the district on aping dried sludge to some remaincres in the highly acid tract in uthern Illinois.

Grasses and small trees are growthe gray skeletons of trees exed to the acid runoff.

One planting of cereal rye was so sh it brought offers from neighbornever produced a crop its equal. Foresters from throughout the ation have visited the tract and ntinuing test results have brought

Lightning detected on Venus

st rift valley discovered by the eer Venus Orbiter probe may the result of planetary activity rikingly different than that experied on Earth.

The 15,000-foot-deep, 900-mile-ng valley, seems to be the work of ernal planetary forces that have ced open the planet's crust e were findings released Wedsday in a report from the National eronautics and Space Adminis-ation's Ames Research Center.

Other information relayed from neer Venus Orbiter include evi-"polar vortex" near nus' north pole, a 650-mile wide, ighly circular region of downwing winds which may be a key echanism in the planet's atmoseric circulation

The discovery is based largely on dramatic new series of photos of loud formations in the planet's at-

The report also presents findings which confirm reports of virtually ntinuous lightning between 2 and 32 kilometers above the planet's surice, first detected by the Soviet nion's Venera probe last De-

"Chemical fires" due to reactions f various compounds in the superated atmosphere have been cited s a possible source for these erupns of light, which occur as freently as 25 times per second.

Electrical discharges like those hich cause lightning on Earth also have been cited as a possible source although increased intensity close to the planet's surface and the unsually steady character of the glow make this explanation less likely.

The probe's magnetometer also has identified what seem to be nique magnetic field structures in the planet's ionosphere. Scientists uggest these magnetic structures nay be caused by the strong "solar vind" coming into contact with the planet's ionosphere.

Polar bear dies in zoo after beating

United Press International
ST. PAUL, Minn. — An intruder at the Como Zoo apparently beat to death Kuma, the zoo's popular polar bear, with a piece of pipe and a concrete block. Zoo Director John Fletcher said the beating took place after hours.

Police said they had no early leads, but Fletcher said it was possible the intruder got in through a section of fence that was being repaired. The pipe and concrete block were found in the bear grotto Tues-

'I don't know the reason, but bears are the subjects of a lot of attacks in zoos," Fletcher said.

Zookeepers found Kuma dead when the zoo opened. Her mate, Mato, had to be tranquilized before

the body could be removed. The St. Paul Zoological Society offered \$500 for information leading to the arrest of the attacker and the Minnesota Humane Society added \$100.

> THE BATT DOES IT DAILY

Monday through Friday

HARRISBURG, Ill. — A 192into the project with 80 cubic yards
re no-man's land in the Shawnee of dry sludge which was applied to a

onal Forest is getting a facelift 73-foot square test plot.

Liquid sludge from the district's dge.

Calumet lagoon was used earlier to treat the 81 acres of the plot, regarded as probably the "hottest" arters of Shawnee, on strip-strip mined land in the United States. It was applied during a three

year period from 1975-78.

Mikeal Jones, a Tucson, Ariz., na-

Jones said the strip mining operation, before the federal government acquired the Palzo acres, recovered two seams of coal, exposing a double dose of shale with high deposits of

The shale, exposed to the air and g in an oasis-like setting against a rainfall, created sulfuric acid in ackdrop of barren untreated acres levels dangerous to man, animal and vegetation. The mining also created problems with iron, aluminum and cadmium.

The runoff from the Palzo acres farmers to harvest it and one flows into Sugar Creek which rims that unmined land in the area the plot on the west and then runs into the south fork of the Saline River and ultimately into the Ohio

Normally you can expect three or four years' wear out of a pair of leather boots, but working around Palzo you can go through a pair in one year," said Jones.

Neutral soil has a pH rating of seven on the acid-alkaline scale with

Recently, four huge trucks rolled numbers below it growing to the project with 80 cubic yards progressively more acid and higher numbers more alkaline. Before the liquid sludge applications, the Palzo acres had a pH of 2.5 — not quite at the battery acid level but too "hot"

to grow anything.

With a special plow, the liquid sludge was incorporated into the top 12 inches of the acid soil. The treatment has brought the pH up to

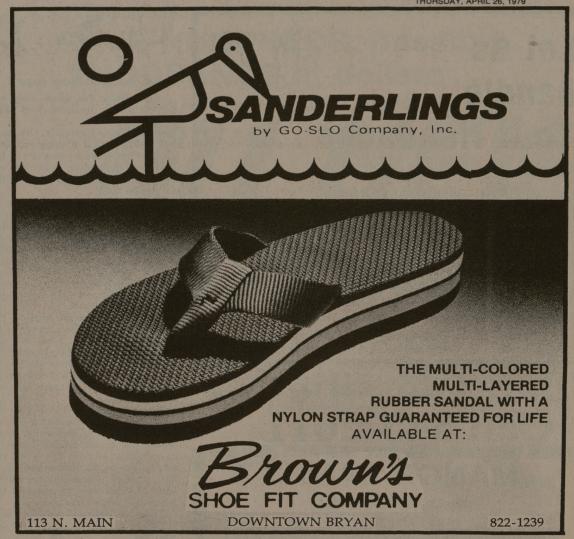
Jones said the main accomplish-The Metropolitan Sanitary Sewer tive and a hydrologist for Shawnee, strict of Greater Chicago picked is mothering the land restoration ment of the project thus far is to cover crops which help check ero-

tests on water on the plots show good results," he said.

A Southern Illinois University research team planted 17 types of trees on the treated acres, including white pine, green ash, silver maple, sycamore and autumn olive, Jones said. The best results have been obtained with green ash, white pine and autumn olive.

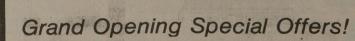
Jones sees definite possibilities for the restored area as a recreation area or perhaps for timber production. Years of testing remain, how-ever, before it will be known if the sion. No positive effects have been noticed yet in the runoff water "but could be safely consumed by man.



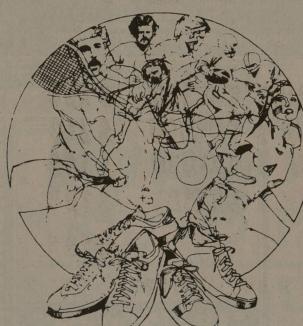


WOODSTONE GRAND OPENING





	REG.	SALE
Gripper (Saucony)	26.95	20.95
Ms. Gripper (Saucony)	24.95	18.95
Runner (Adidas)	41.95	35.95
Runner Super	48.95	37.95
Shooting Star (Adidas)	13.95	10.95
Lady TRX (Adidas)	29.95	26.95
Mens TRX	29.95	26.95
Tom Okker (Adidas)	34.95	29.95
Fred Perry T-311 (Etonic) 21.95		18.95
Fred Perry T-160	24.95	15.95
Brooks Champion	18.95	10.95
Brooks Classic	18.95	10.95



Grand Opening Special Offers!

	REG.	SALE
Wooden 3700 (Wilson)	27.95	15.95
Wooden 3102	29.95	16.95
Wooden 3702	23.95	13.95
Jayhawk (Tiger)	29.95	22.95
Hardcourt (Puma)	31.95	25.95
Hardcourt Smash	32.95	25.95
Angel (Puma)	22.95	16.95
Poly Match 5	22.95	16.95
Dove (Saucony)	20.95	13.95
Quickstar (Converse)	29.95	24.95
Staubach (Brooks)	9.95	6.95

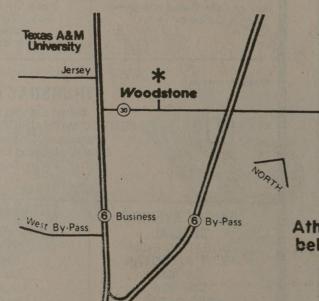
Come By This Saturday And Meet Former Aggie & Current Pro Greats ED SIMONINI, FRANK MYERS & MARK DENNARD

ED SIMONINI - Many sald Simonini would be too small for pro football but after his rookle season, Simonini has been a starting linebacker, for the Baltimore Colts for the past 2 seasons. Simonini, who is one of the most popular players ever to play at A&M, was an all-SWC selection four times, a rare honor. Simonini helped A&M produce one of the nation's best defenses in 1975.

FRANK MYERS, 6-4, 255, A two-time all-SWC choice at offensive tackle. Drafted by the Minnesota Vikings where he started much of the 1979 season.

MARK DENNARD, the 6-2, 245-pound center was an all-SWC selection his last season at A&M (1977) and was drafted by the Miami Dolphins where he spent most of the season last year on the dis-

Honorable mention all-american his junior year.



Athletic Attic is located behind Monterey House.

WOODSTONE SHOPPING CENTER

907 HARVEY RD. (HWY.30) 693-1609