

Unseen Life Beneath Soil Essential to Life Above

In last week's column we wrote about the importance of the soil's fertility and how it is maintained by the "Nitrogen Cycle". Just as important to the functioning of soil are the myriads of small life-forms which live unseen, under its surface. These include such creatures as burrowing shrews, moles and earth worms and myriads of microscopic plants and animals including bacteria, molds, mycorrhizae and other microscopic fungi.

some two tons of soil annually.

THE CLEVER termite which needs to avoid humidity and light, air conditions its mound cities in desert areas by tunneling down as far as 100 feet for water.

The destructive termites of the tropics break down the tough cel-

lulose in wood cells thus preparing it for decay. The parasitoid protozoa which inhabit their digestive tracts transform this chewed muck into energy foods. In Africa there are as many as 30 termite colonies per acre requiring the moving of 5,000 tons of soil annually in their construction.

ARISTOTLE CALLED earth worms the "intestines of the earth." There are some 1800 species of their kind varying in size from an inch to an Australian variety which is 10 feet long.

They abound in our temperate zone soils where they act as humus-makers, their castings being 45 per cent richer in nitrogen and phosphorus and 50 per cent richer in potassium than the soil they eat.

In the fabulously fertile delta of the Nile their castings amount to as much as 200 tons per acre annually.

THE TOP TWO inches of forest litter supports a multitude of small creatures such as wood lice, nematodes and mites, many of which are in turn preyed upon by certain varieties of fungi.

Together their life processes represent a large sector in the circle of decay which is so necessary to life and which is constantly operating in the soil.

(See SOIL, 8-D)

84 YEARS EXPERIENCE
RESIDENTIAL
AND
COMMERCIAL
ROOFERS
Cutters & Downspouts
J. J. Landis
ROOFING COMPANY
551 E. VERNOR HWY., DET.
WO 2-0512



ECCENTRIC PHOTO

Tabs on Tickets

"Ten for you and 10 for you and 10 for me . . ." is the under-the-breath count of a ticket chairman. The upcoming lecture series on the Far East, sponsored by the Altrusa Club, is no exception. Kingswood headmistress Miss Marion Goodale (left) looks on as Dr. Jean Forest (yes, SHE in the middle) and Grace Scalia, ticket chairman, tackle the task. The lecture series will be held in the auditorium of Kingswood School on the evenings of Oct. 1, 8 and 15. Speakers will be Dr. Joseph K. Yamagiwa and Dr. L. A. Peter of the University of Michigan.

THEIR MAIN function is in bringing the highly mineralized subsoil to the surface and mixing it with the topsoil. Scientists estimate that the gophers in Yosemite Park move as much as 8,000 tons of topsoil annually.

More than 95 per cent of our insects spend the larval stage of their lives in the soil.

Consider the ants of which there are at least 15,000 species, plus some 6,000 other creatures which share their lives as parasites or saprophytes. In their highly secretive and complex group organizations certain species use skills such as compost-making and propagating by cutting and weeding.

One genus (Atta) of leaf-cutting ants, cultivates its own brand of fungi upon which it feeds. In our western soils there may be as many as 20 to 30 ant cities per acre, each involving the moving of



Mrs. Prehse

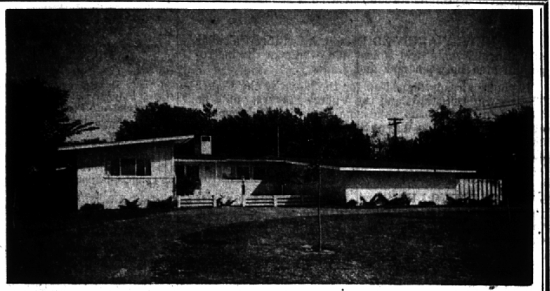
BLOOMFIELD HILLS CONTEMPORARY

Custom built for present owner.

- Three family bedrooms and 2 baths, plus
- Maid's bedroom and bath
- Library plus mahogany panelled play room
- Built-in oven, range and refrigerator
- Luxurious carpeting and drapes
- Thermopane windows thru-out
- Ample basement

Perfection for the discriminating buyer!

\$49,500



3341 Kerway



Lighting your way to better living

BENJAMIN & BISHOP, INC. REALTORS

259 S. Woodward, Birmingham, Michigan

MI 4-3232 - JO 4-5728

Cultural Events

Sept. 19

BIRMINGHAM THEATRE—Double feature: "Toys in the Attic" and "A Child Is Waiting."

BLOOMFIELD THEATRE—Double feature: "Cash McCall" and "PT 109."

RAVEN GALLERY—Exhibition of "The Finest Selected Contemporary Art"—including work by Marc Chagall, George Rouault, William Meyerowitz, Sheldon Iden, Joseph Oliverio, Wallace Mead, Mitchell Curtis and Tamimi Shima—at the Raven Gallery, 136 Brownell, Birmingham. Hours are 11 a.m. to 1 a.m. daily except Mondays.

CRANBROOK—Exhibition of "Antique Toys"—children's toys from the 18th to 20th centuries—in the Young People's Art Center Gallery in the Cranbrook Academy of Art Galleries on Lone Pine Road in Bloomfield Hills. Open 2 to 5 p.m. except Mondays.

LITTLE GALLERY—Original Master Drawings of Eight Centuries (1270 to 1963) through Oct. 5, at 915 E. Maple, Birmingham. Open Tuesdays through Saturdays 9 a.m. to 6 p.m.

BLOOMFIELD ART ASSOCIATION—Exhibition of award winners from the Birmingham Arts Festivals 1961-63 continues through Sept. 29, at 1516 S. Cranbrook Road, Birmingham. Gallery is open daily except Monday from 2 to 5 p.m.

BRIDGE—Birmingham Duplicate at the YMCA, 400 E. Lincoln, Birmingham, beginning at 7:45 p.m. Open to the public.

Sept. 20

RAVEN GALLERY—Folk-singing group, "The Toppersiders" will entertain, beginning about 9 p.m., at the Raven Gallery, 136 Brownell in Birmingham.

BAA PROGRAM—Peggy and Albert deSalle of The Little Gallery will give a talk on their recent trip to the Orient at the Birmingham Art Center, 1516 S. Cranbrook Road, Birmingham, at 8:30 p.m. Open to the public. No admission charge for members; admission charge for non-members.

Sept. 21

RAVEN GALLERY—Folk-singing group, "The Toppersiders," will entertain, beginning about 9 p.m., at the Raven Gallery, 136 Brownell in Birmingham.

Sept. 22

CONCERT—Concert featuring Detroit musicians Helen and Joseph Kertesz and Jesse Forstot at the Northwestern Unitarian-Universalist Church, 29225 Northwestern Highway at 8 p.m. Open to the public.

RAVEN GALLERY—Folk-singing group, "The Toppersiders," will entertain, beginning about 9 p.m., at the Raven Gallery, 136 Brownell in Birmingham.

Sept. 23

CAMERA CLUB—Meeting of the Bloomfield Hills Camera Club at 8 p.m. at the Cranbrook Hall of Science. Open to non-members.

BRIDGE—The Community House Bridge Club will resume at 7:45 p.m. at The Community House. Open to the public.

Sept. 24

BRIDGE—Tuesday Birmingham Duplicate at the home of Hilda Murphy, 2424 Manchester, Birmingham, beginning at 1 p.m. Open to the public.

Sept. 25

BRIDGE—The Birmingham-Bloomfield Area Bridge Club will meet at the YMCA, 400 E. Lincoln, Birmingham, beginning at 7:45 p.m. Open to the public.

Sept. 26

BRIDGE—The Birmingham Duplicate Bridge Club will meet at the YMCA, 400 E. Lincoln, Birmingham, at 7:45 p.m. Open to the public.

Sept. 28

HOOTENANNY—Saturday night hootenanny at the Birmingham YMCA, 400 E. Lincoln, beginning at 7:30 p.m. Open to the public.

Sept. 30

BRIDGE—The Community House Bridge Club at 7:45 p.m. at The Community House. Open to the public.

Oct. 1

RAVEN GALLERY—First night of three-night run of New Orleans Dixieland band concerts at the Raven Gallery, 136 Brownell, Birmingham.

BRIDGE—Tuesday Birmingham Duplicate at the home of Hilda Murphy, 2424 Manchester, Birmingham, beginning at 1 p.m. Open to the public.

Oct. 2

RAVEN GALLERY—Second night of three-night run of Dixieland band concerts at the Raven Gallery, 136 Brownell, Birmingham.

BRIDGE—The Birmingham-Bloomfield Area Bridge Club at the YMCA, 400 E. Lincoln, Birmingham, beginning at 7:45 p.m. Open to the public.

Oct. 3

RAVEN GALLERY—Third night of three-night run of Dixieland band concerts at the Raven Gallery, 136 Brownell, Birmingham.

BRIDGE—Birmingham Duplicate at the YMCA, 400 E. Lincoln, Birmingham, beginning at 7:45 p.m. Open to the public.

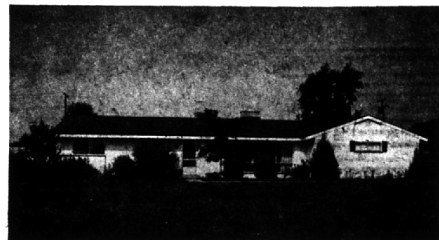
IT'S HARD TO BUY THE WRONG HOME When you look with Brook

"Is this the right home for our family?" "Is it a sound house?" "What about re-sale value?" "How is the location?" "Are there playmates for our children?"

Questions like these make up the "agony of decision" that every

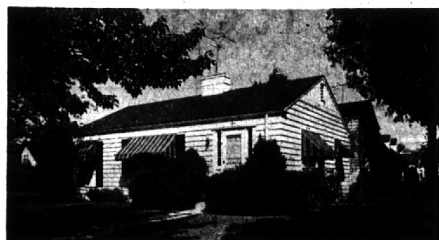
prospective home buyer faces. And here is where the objective advice of the skilled professionals at Brook is so helpful and comforting. They have helped so many people choose the right home that more than 70% of our business comes from referrals by satisfied clients. Call us.

Moving to Denmark, must sell!



The owner is in Denmark—his wife is here waiting for someone to buy this appealing modern ranch. Lovely living room with fireplace wall, 3 bedrooms, big dining area, great family kitchen, big lot in a fine location. Everything goes with the house from carpeting to power mower and garden tools. Low \$ \$ \$!

Little home, big impact



This delightful home seems to welcome you with open arms as you go up the front walk. Nice corner lot in a fine Birmingham area. Completely painted outside last spring. 3 bedrooms, basement, very well built. \$15,900.

A Gee-Whiz Setting



This immaculate, compact ranch is situated on an acre of spining-tling beauty. This picture tells only a small part of the story. 3 bedrooms, excellent porch, very appealing living room with fireplace. Completely redecorated last year. A giveaway at \$19,900.

Apple-pie condition!!!



You've rarely seen a home kept as beautifully as this one. 3 bedrooms, superb kitchen and breakfast area, 1 1/2 baths, tiled basement, built-in oven and range, wet plaster, marble sills, fenced yard, corner lot. \$22,900.



MAX

BROOCK

INC.

"Nationally Known Realtors"

300 S. Woodward

MI 4-6700

JO 4-6700

Open daily 9 to 9 Saturday 9 to 5