

Prairie 'Hopper Calls by Ticking Of Mouth Parts

Washington, (Science Service)—A rather ordinary looking grasshopper with a talent for lip-smacking has turned out to be quite an unusual insect. Paratylopsis bruneri Scudder is the first insect known to communicate over fairly long distance by producing an audible sound from the mouth—literally smacking its lips.

Dr. Richard D. Alexander of the University of Michigan's Museum of Zoology, Ann Arbor, while collecting insects in a prairie south of Valmeyer, Ill., had bagged several of these large grasshoppers before he realized that soft ticking sounds were coming from this species.

Dr. Alexander noted that the mandibles, or mouth parts, were moving in time with the sound. When one hopper ran down, a second later another, just a few feet away, would begin ticking.

The hoppers responded not only to each other but to Dr. Alexander as well. After ignoring various artificial noises, a nearby male answered the call of a metal thermometer case striking a brass belt buckle.

Fast Producers
Produced at the rate of six or seven per second, usually in groups of four, the grasshopper ticks resemble a shorter, softer version of the ticking song of a katydid. The call can be heard several yards away.

Dr. Alexander reported in Science that other insects often produce long distance sounds by rubbing their hind legs together. Mouth sounds are produced by other insects, but not for the purpose of long-range communication.

It may be, the Michigan collector says, that the grasshopper's lip-smacking signal evolved through a stage in which feeding noises were significant. At present it may be effective as a long-range signal only in areas where there are few other sound-producing insects.

Scientists Study Growth of Fish In State Streams

Corvallis — Goldfish may not believe this, but they have more privacy in their glass-walled bowls than other water-bound creatures have in Oregon State college's artificial indoor streams.

OSC scientists are more than just curiously peering at fish, crayfish, snails, insects and other plants and animals living in these man-made streams. They're studying how and why they grow.

Charles E. Warren, fishery biologist with the OSC agricultural experiment station, and Dr. Harry K. Phinney, associate professor of botany, are making the studies with a \$24,500 basic research grant from the National Science Foundation.

Warren explained that plants and animals in streams — like plants, people and animals on land — depend on the sun for energy. Plants use the sun's energy directly by changing simple materials such as carbon dioxide, nitrogen and phosphorus into compounds that meet their energy needs.

Little Is Known
But humans and animals can't do this. They get their energy by eating the plants. Much is known about these plant-animal relationships on land, but little is known about them in water. The OSC study may lead to greater understanding of the subject.

Since water is necessary for industrial and home uses, waste disposal, fisheries and recreation it is important to understand how plants and animals grow in the water, Warren emphasized.

The OSC scientists will study growth made by animals in streams under varied conditions to determine influences of different nutrients, light, and water movement. For their research they are building artificial streams where they can control water movement, sunlight and amounts of nitrogen, phosphorus, and carbon dioxide. They will use various types of stream bottoms — sand, gravel, rocks, and other materials.

Their indoor streams are at the water pollution and fisheries laboratories in McDonald forest near Corvallis.

Trucker's 'Break' Was a Noisy One

Chicago — George Tandy quietly backed his truck in a side street to make what proved to be a costly break. Minutes later four fire engines came chattering at him in response to a fire alarm he'd backed into accidentally. He had to pay \$30 damages.



LADIES' DAY FRIDAY
Special Hours Friday 12 noon to 9 p.m.

2 DAY SALE SPECTACULAR



Reg. 249.95
Giant 40-in. Electric Range
\$10 Down **\$228** \$11 a Month

Big 23-in. Clock Controlled Oven
2 spacious storage drawers
Infinite heat controls
Detachable Oven door

FREE
—Friday Only—

- To First 100 Ladies— A top-quality S/Steel Paring Knife
- Needle Threader to Each Lady
- Customer Visiting our Appliance Dept.
- 49.95 Deluxe Barbecue-Smoker to be given away Friday Nite, 8 p.m. No purchases necessary, but winner must be present to win. Obtain Ticket from any sales person.
- Free 7-Up, Coffee and Cookies All Day Friday



ONLY \$5 Down
5-Pc. Maple or 5-Pc. Danish Modern
Room Group
\$159⁸⁸

Your choice of either group. Includes sofa, that converts to double bed, chair, cocktail table and 2 end tables

12 Noon to 9 P.M. FRIDAY

9:30 A.M. to 5:30 P.M. SATURDAY



Reg. 249.95
1 1/2 H.P.
Air Conditioner
\$10 Down **\$228** \$11 a Month

11,700 B.T.U. capacity. Cool, controlled comfort. Germicidal filter. Install yourself. 230 v., 10 amp.



YOUR CHOICE
\$228
\$10 Down, \$11 a Month

- 13 cu. ft. 2 door refrigerator - freezer
- 15 cu. ft. upright freezer. Automatic defrost on refrigerator. 105 lb. freezer compartment. Upright freezer holds 525 lbs. of food.



ONLY \$5 Down, \$12 a Month
SALE! Modern
Sofa and Chair
\$99⁸⁸

2 ONLY
Cushioned in luxury foam comfort that lasts. Deep coil base topped with foam cushions. Brown or turquoise

- 34.95 6-ft. Redwood Picnic Table Seats Six Comfortably. Weather Resistant..... **19⁸⁸**
- 99.95 Lawn Swing Durable Vinyl Cover. Innerspring Cushion..... **69⁸⁸**
- 29.95 7-ft. Lawn Umbrella Solid Color Vinyl. Tilts. 2 Only **14⁸⁸**
- 89.95 Bunting Glider Floral Vinyl. Heavy Alum. Frame. Converts to Double Bed **59⁸⁸**

Over 300 Super Spectacular Sale Items Which We GUARANTEE To Be Priced at the Lowest Level of the Season

<p>Ready-Made Slipcovers For Sofas and Chairs. Florals and Solids Reg. to 21.98 \$7⁹⁹</p>	<p>GIRLS' Dresses Sizes 3 to 6x, 7 to 14 Reg. to 2.98 97^c Reg. to 3.98 \$1⁹⁵</p>	<p>WOMEN'S Dresses Reg. 8.98 to 10.98..... \$4 Reg. 12.98 to 14.98..... \$7 Reg. 16.98..... \$8</p>	<p>GIRLS' Sandals White or Red, Closed Heel, Toe. Foam Rubber Sole Reg. 3.99 \$1⁷⁷</p>	<p>Woven Bedspreads Assorted Colors, Patterns Reg. 5.98 Full size only \$2⁹⁷</p>	<p>Men's Suits Summer Weight, 55% Dacron, 45% Wool Reg. 34.95..... 19⁷⁷ Men's Sportcoats All wools and blends. Reg. \$25 14⁷⁷ Limited Quantities—Broken Sizes</p>
<p>Toilet Tissue Facial Tissue 10 rolls \$1 Quality.....</p>	<p>Hanging Fixture 3-Way Switch, Brushed Brass Early American Style. Limited Quantity. Reg. 13.45 \$5⁹⁷</p>	<p>Sleeping Bag 4-Lb. Celecloud Fill, Full Zipper, Air Mattress Pocket Reg. 15.95 20 ONLY \$10⁸⁸</p>	<p>Wheel Barrow General Utility Use. Heavy Gauge Steel, Sturdy Construction REG. 9.95 \$5⁹⁷</p>	<p>Tub Enclosure Glass, Install it yourself and save. REG. 49.95 \$34⁷⁷</p>	<p>Cleaner and Auto Wax Paste Type. Top Quality—Equals Well Known Brands. REG. 1.49 87^c</p>

SATISFACTION GUARANTEED or your money back!