Poultry Pointers

(Continued from Page D4)

life cycle is temperature dependent, requiring 10 days at 85 degrees F, 21 days at 70 degrees F, and 45 days at 60 degrees F.

Adult flies live an average of 3 to 4 weeks, but can live twice this long. They are most active during the day at temperatures of 80 to 90 degrees F and become inactive at night and at temperatures below 45 degrees F.

Resting adults can be seen on the ceiling, walls, posts, and other surfaces inside a poultry house and, outside a house, beneath roof overhangs, on walls, fences, and vegetation. Preferred resting places can be detected by the accumulation of "fly specks," light colored spots formed from regurgitated fluid and darker fecal spots.

Little House Fly Fannia Canicularis (L.)

High populations of the little house fly may occur on poultry farms and become the predominant fly pest in some areas.

The little house fly resembles the house fly, but is smaller (about 3/16 inch) and has three brown stripes on the thorax. This fly is normally associated with littertype floor housing and open window ventilation.

Like the house fly, the little house fly may invade homes in nearby residential areas, but tends to be slightly less annoying since it does not settle as readily on food or people. Both sexes can be found resting on weeds, branches, or sides of buildings. Adult males show a distinctive aimless hovering or circling flight behavior of long duration within the poultry house or in outside shaded areas. Females flies are less active and more often found near breeding

Since this fly is less tolerant of

hot, midsummer temperatures than the house fly, it often emerges in large numbers in early spring, declines in midsummer, and may peak again in late fall.

The little house fly life cycle is similar to that of the house fly. Eggs are deposited on decaying organic material, especially excrement from poultry, cattle, and humans. Larvae hatch from the eggs in 36 to 48 hours. Unlike the house fly, the larvae are brown, flattened, spiny organisms. Larvae require 8 days or more for development, depending upon temperature and manure conditions. Pupae resemble the larvae in appearance and last about 8 days. The egg-toadult life cycle typically ranges from 18.5 to 22 days, but may be longer depending upon temperature. In the laboratory, more than one half the adults live 14 days or more. All stages except the egg have been recovered during the winter on Massachusetts poultry farms, although mature larvae predominated. Small numbers of adults overwinter in cracks and crevices.

Black Garbage Fly Ophyra Aenescens (Wiedemann)

Black garbage flies, found in large numbers around poultry facilities, are shiny bronze-black and a little smaller than house flies.

The life cycle is similar to that of the house fly and ranges in duration from 14 to 45 days. Black garbage fly larvae closely resembling house fly larvae hatch from the egg in 12 to 16 hours. Larvae develop in a minimum of 5 days and may prey on other fly larvae.

The pupal stage requires at least 4 days. Adults live an average of 14 to 20 days. Although no overwintering stage is capable of withstanding freezing temperatures, all stages are found throughout the year under suitable conditions.

Unlike the house fly and little house fly, black garbage flies tend to stay on their food source at night rather than rest on the ceiling or outdoor vegetation. Female flies seem to have limited flight activity, yet they have been reported up to 4.4 miles from their breeding

While black garbage fly larvae have been known to exterminate house fly populations, they cannot be considered beneficial because of their large numbers on the farm

and their ability to disperse as adults into nearby communities. Two other species of black garbage flies, O. Leucostoma, a widely distributed species, and O. Capensis, may be found on Pennsylvania poultry farms. All reports familiar to the author have been O. Aenescens.

Small Dung Fly **Sphaerocerids**

Small dung flies are very small, blackish or brownish flies that breed in manure and other decaying materials. These flies often occur in large numbers in poultry manure, but do not appear to pose a nuisance on the farm or to nearby communities.

Sphaerocerids are among the first arrivals at new manure. Adult sphaerocerids forage over a broad range of manure moisture content. but predominate at the peak of the manure cone where moisture content is higher. Larval development occurs where moisture exceeds 50 percent.

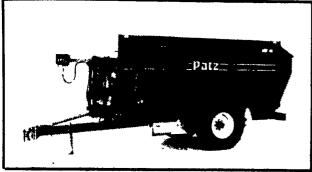
Control efforts are discouraged because sphaerocerids are not pests and they may be utilized as an alternative food source by beneficial hister beetles.

The next article in this series will be on the different types of control. In the meantime, remember that good fly control is dependent on good manure management.



THE **PROGRESSIVE COMPANY!**

Patz[®] Offers Open-Top Mixers Trailer-Mounted & Stationary



LOW RATE FINANCING -• 24 Mo. • 36 Mo. • 48 Mo. Four notched, 24-inch augers mix fast-even square-baled dry alfalfa in limited

Self-aligning auger bearings mounted

Flanged auger tubes for easy removal Roller-chain reduction with sealed oil bath and planetary gear drive for the augers.

On trailer models, the feed discharge features a hydraulically powered door

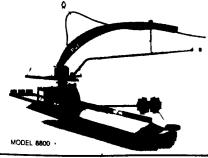
Electronic scales precisely weigh total mixed rations.

For trailer models: 540 R.P.M. PTO For stationary models: electric motors. Capacities of 190, 240 and 290 cubic feet (bigger models available soon).

Stainless steel bottom liner available.

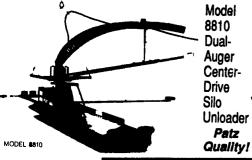
4.9% FINANCING

- Silo Unloaders
- Gutter Cleaners
- Replacement Chain

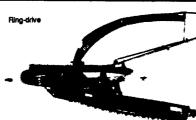


8800 Dual-Auger Surface-Drive Silo Unloader Patz Quality!

Model



RD-820 Ring Drive Silo Unloader



(98C SURFACE-DRIVE SILO UNLOADER

The Best Just GOI **Better!**



SEE YOUR NEAREST PATZ DEALER

Patz

ALEXANDRIA MAX ISENBERG 814-669-4027

BALLY LONGACRE ELECTRIC 215-845-2261

BEDFORD BENCE'S FARM EQUIP. 814-623-8601

BELLEFONTE LUCAS BARN EQ. 814-383-2806

BELLEVILLE MILLER-LAKE Inc. 717-935-2335

HOP BOTTOM*
LENOX FARM SUPPLY **Kurt Kulick** 717-289-4349

LEBANON CEDAR CREST EQUIPMENT 717-270-6600

MECHANICSBURG JOHN JONES 717-766-8582

MIFFLINTOWN ZUG FARM & DAIRY EQUIPMENT 717-463-2606

ORANGEVILLE FRANKLIN D. HESS FARM EQUIPMENT 717-925-6939 QUARRYVILLE UNICORN FARM

SERVICE James E. Landis 717-786-4158 SHIPPENSBURG WITMER EQUIPMENT

SERVICE 717-532-6139

SOMERSET GROVE EQUIP. SALES Mark Knepper Cliff Lynn 814-445-6306

HAGERSTOWN, MD **TRI-STATE** FARM AUTOMATION 301-416-7340

KENNEDYVILLE, MD PINDER SERVICE CO. 410-778-0799

WESTMINSTER. MD* AUTOMATION Carrol & George Gesell 410-775-7300 410-848-3622 WHITEFORD, MC

410-836-0480

POUND, WI PATZ SALES, INC. 414-897-2251

DISTRICT

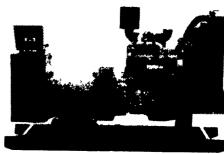
MANAGERS Dennis Rohrbaugh 717-530-5410 Agri Bee Inc. James Bilski, Pres.

SAFETY

New Dealers

814-696-9447

GENERATORS



DIESEL L.P. GAS P.T.O.NEW & USED

SPECIALIZING IN COMPLETE AUTO START STANDBY POWER SYSTEMS

For Sales and Service Call The Manufacturer

MARTIN ELECTRIC PLANTS

280 Pleasant Valley Rd., Ephrata, PA 17522-8620 Tel: 717-733-7968 Fax: 717-733-1981







MODEL F-100

MODEL D-100

A Barn-Dry Spreader that is built for a Farmer -**HEAVY DUTY CONSTRUCTION**

• w/10" Steel Hub Wheels • w/80 Lb. Capacity

: Dealer Inquiries Invited =



AARON GROFF & SON

FARM & DAIRY STORE 103 Clearview Drive, Ephrata, PA 17522 Phone (717) 354-4631 Store Hours - Mon., Thurs. & Frl. 7 A.M. to 8 P.M. Tues. & Wed. 7 A.M. to 5 P.M.; Sat. 7 A.M. to 12 Noon