

lung or abdominal cavity.

These same epidemiologists are conducting a study of 150 dogs with breast cancer in order to identify dietary factors, drugs, or other exposures that increase their risk of this disease. The ultimate goal is to find a diet that will decrease the chances of developing breast cancer, especially in older, unspayed females.

Canine bladder cancer is another disease receiving the attention of the epidemiologists at VHUP. More than 100 cases have been diagnosed by the biopsy service. Preliminary findings suggest that the terrier breeds, particularly the Scottish Terrier, are more prone to bladder cancer. The Keeshond also appears to be at increased risk.

If funds can be collected, a bladder cancer study could be started. The objective would be to determine why certain breeds are at increased risk and if there is any association with a previous history of urinary tract infection. The research also would focus on exposure to specific chemicals in the home and neighborhood that could be related to development of bladder cancer in a susceptible breed.

This is one of many projects for which support is needed. Interested persons may contact Dr. Josephine Deubler at 215-898-8862.

Book Review:

Bird Owner's Home Health and Care Handbook
Gary A. Gallerstein, D.V.M.

Howell Book House, Inc.
230 Park Avenue
New York, NY 10169

Hard cover, 292 pages, including index with generous black and white photographs and line drawings, plus four pages of color plates illustrating normal and abnormal droppings.

Price: \$17.95.

The text is well organized, beginning with the selection and purchase of a new bird, and

carries through husbandry practices, such as appropriate diets, cages, environments, and acceptable disinfectants.

The section on anatomy and physiology gives a brief description of each organ system, then explains how owners can evaluate the particular organ system at home— invaluable advice to the owner as well as the veterinarian. Owners will be more attuned to the variations in their birds, more observant of signs of disease, and more prompt and knowledgeable should a trip to the veterinarian become necessary. Specific disease entities are covered, and a special index is provided to direct the reader to locations in the text discussing particular clinical signs or problems.

Information is provided regarding a visit to the veterinarian: facilities, diagnostics, and treatment procedures. In addition, there are instructions on home supportive care for sick pet and wild birds, especially helpful should a veterinarian not be available immediately.

Avicultural procedures are briefly touched upon, and a list of national and foreign bird organizations is provided in the appendix. The appendix also contains concise data with general husbandry and breeding requirements for the more common caged birds.



To complete the wide spectrum of information provided, Dr. Gallerstein has included a very well written chapter, by Steve Martin, on "Taming and Training Birds". It includes practical suggestions for taming, as well as steps to follow to teach birds specific behaviors and tricks. There is also a section on commonly asked questions regarding behavior in birds.

This book probably represents the best organized and most generally informative book of its kind on the market today. The information provided is sufficient to provide novice and experienced bird owners with the background necessary to maintain their birds in optimum conditions for good health.

It does not provide details on the specific treatment of disease entities which are best left to the veterinarian. However, the home care measures described should maximize the chances for recovery should a bird become clinically ill as prompt treatment is more critical in birds than most other types of animals.

Disinfecting with Clorox

Sodium hypochlorite solution is the disinfectant of choice to inactivate canine parvovirus and canine coronavirus. The recommended strength is one part of Clorox to 30 parts water. Use a measuring cup and add a half cup Clorox for each gallon of water. Do not make a stronger solution. Use plastic containers. The solution "eats" metal and cannot be used for soaking instruments or metal utensils. Clorox in water is used for disinfecting. For cleaning, a soap solution may be used instead of water to make the 1:30 dilution.

Parvoviruses are highly resistant to inactivation. Most disinfectants are not effective. Virus is found in fecal material for as long as three weeks after the dog has recovered from clinical illness. Coronaviruses may be shed intermittently for much long periods.

Prevention depends on a vaccination program. However, when a disease is present, special effort is necessary to eliminate the virus from kennels and prevent unnecessary exposure.

Animal Health Technician Program

Ten years ago, the School of Veterinary Medicine and Harcum Junior College, Bryn Mawr, initiated a joint training program for Animal Health Technicians. Over the decade, the program has developed into one of the most successful ones offered by Harcum, and it is the only AVMA accredited program for animal health technicians in Pennsylvania.

Each year between 60 and 75 students enroll in the six-semester program which leads to an associate degree in science. Four semesters are spent in classroom instruction at Harcum in such subjects as mathematics, basic sciences, anatomy, veterinary parasitology, pharmacology, hematology and other subjects necessary for working with animals.

Once the classroom instructions end, students are ready for practical experience. This is garnered during a 26-week practicum at the School of Veterinary Medicine. The Harcum

students spend 13 weeks each at VHUP and at New Bolton Center. At both facilities they work in the wards, the emergency clinic, the operating room, intensive care unit, radiology and anesthesiology. They receive hands-on experience in the small animal hospital and in the large animal hospital. By the time the practicum is over they have cared for such diverse patients as a parrot or a mare with colic. Throughout the practicum the Harcum students are trained and taught by the staff nurses at the School, the clinicians, and the fourth-year students.

"The animal health technician program has not only benefitted the Harcum students but also our students," said Dr. Sheldon Steinberg, director of the program at the School. "The veterinary students, while working with the animal health technicians, get an understanding of the routine tasks technicians can perform, from drawing blood to running sophisticated tests. Our students learn to depend on the technicians and they realize that such personnel can greatly enhance the running of a veterinary practice."

The Harcum students are trained to use the advanced technology available here at the School. Though they are also trained to work with equipment commonly found at a veterinary practice. Most practitioners do not have automated development equipment for radiographs; in practice such films have to be developed by hand. This the technicians are taught. The training also includes the latest anesthesia methods and techniques. When the practicum is completed, Harcum students have a very good understanding of the demands of a veterinary office.

The graduates do not have trouble finding jobs. Many practitioners regularly contact the Harcum Career Center when looking for technicians. Many opportunities exist in private industry and in government for the animal health technicians.

The program, according to Dr. Steinberg, is a successful one, one which provides superb practical training and classroom training, equipping the graduates to work in a profession which is becoming quite sophisticated as new technology develops.