

 $\ensuremath{\textbf{C}}$  . Doxycycline hyclate tablets, or drops, at 25 mg/

Ib twice daily for 5-7 days then once daily for up

- to 6 weeks.
- **D.** Nasal flushes with appropriate antibiotic (antibiogram) for chronic sinusitis which may be primary or secondary.

### PREVENTATIVE HEALTH PLAN NOT USING DIAGNOSTICS

Refer to previous plan for specifics. Breeders done 4-6 weeks before pairing. Other birds done 6-8 weeks prior to racing or showing.

- I. Vaccinations:
  - A. Paramyxovirus B. Paratyphoid C. Pox Wait one week
- II. Worming:
  - A. Ivermectin (Ivomec) B. Mebendazole (Telmintic) C. Levamisole (Tramisol) Two days of vitamins... Wait 2-3 days...
- III. Coccidiosis Treatment:
  - A. Sulfachlorpyridazine (Vetisulid) B. Amprolium (Corid or Amprol) C. Clazoril (when available) Two days of vitamins... Wait 2-3 days...

- IV. Trichmoniasis (canker) & Hexamitiasis Treatment:
  A. Emtryl
  B. Ipropran
  C. Spartrix
  D. Flagyl
  E. Ronidazole
  Two days of vitamins...
  - Wait 2-3 days...

Note: Telmintic can be dosed at the same time as Emtryl and Amprolium or Vetasulid, thus treating worms, coccida and trichomonas concurrently. Follow with two days of vitamins. Use caution when mixing other medications not proven compatible, as toxicities may develop in some cases of drug combinations.

V. Prophylactic treatment for Paratyphoid or E. coli with antibiotics is medically un sound, but may have benefit in some cases. Ammoxcillin, Ni- trofurazone, Vetisulid, or Apralan are common drug choices. Prophylactic treatment for, or periodic treat ment for respiratory infec tions (Chlamydia and Myco-plasma) may be beneficial only is there is some evid ence of respiratory disease. Erythromy cin (Gallimycin), Tylocin (Tylan), Linco mycin (Lincocin) and Tetracycline drugs are com-monly used.

Note: Using any antibiotic blindly is a hit or miss proposition and may actually predispose to infection with a pathogen because of distributing the normal bacteria. Indiscriminate or incorrect use of antibiotics may also contribute to the development of resistant strains and resistant forms of bacteria.

Partial restoration of the normal intestinal flora can be accomplished by the addition of live bacterial products such as Feed Mate 68, or others available from pigeon supply houses, to the feed or water after antibiotic withdrawal. Raised floors (slatted or wire) or open bottom wire floors have significant merit. Concrete floors are easy to clean and disinfect, but may hold moisture at times. Most eggs and oocusts must undergo development in the environment before becoming infective to the next host. Warm and wet environmental conditions enhance this development. Therefore, regular (preferably daily) scrapping and a dry loft are of utmost importance to prevent spread within the loft. Clean lofts mean healthier birds.

Deep litter, if done properly, will create a very dry environment and can be a satisfactory method. Deep litter does produce a fine dust which can be hazardous to the hypersensitive fancier. It may also serve as a reservoir for problems once disease organisms are introduced into the environment. For these reasons it is discouraged.

Overcrowding is the fancier's worst enemy. Crowded birds never have the general good health of uncrowded birds, nor will they perform to their potential in races.

# DISEASE CONTROL

Quarantine new birds. These are very often the source of disease in the loft. The same goes for strays. New birds should be quarantined for 30 to 60 days, ideally. Sick birds should be removed from the general flock and quarantined in cages that can be disinfected between cages.

Don't guess—get positive answers to problems before random treatments are used.

Most veterinarians can help even if they have no specific interest or knowledge of pigeon diseases. They can at least direct you to labs which can examine sick or dead birds for diagnostic purposes. The cost is usually very reasonable.

There are many veterinarians with an interest in avian medicine and some specifically interested in pigeon medicine. They are trying to provide a service to you. Don't be too proud to ask for help when you need it.

## For More Information Contact:

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# HEALTH CARE REGIMEN



## Written By The ASSOCIATION OF PIGEON VETERINARIANS

under the auspices of The National Avial Disease Task Force for Pigeons and Doves as a service to pigeon fanciers.



## HUSBANDRY AND LOFT MANAGEMENT

Loft design should vary with the climatic conditions of a given locale, but lofts should be built with foresight, especially concerning ease of cleaning.



HEALTH CARE REGIMEN

There are two approaches to preventative health care that a fancier can use. The best is to make use of diagnostic laboratory procedures before administering any medications. Unfortunately, due to financial limitations or lack of laboratory facilities and personnel familiar with pigeon diseases, diagnostics may not be used. Two programs, therefore, are outlined here.

### PREVENTATIVE HEALTH CARE WITH DIAGNOSTICS

Breeders done 4-6 weeks before pairing, other birds done 6-8 weeks prior to racing or showing.

- I. Vaccinations done 4-8 weeks before mating or racing.
- A. Paramyxovirus use oil emulsion vaccine approved for pigeons
- B. Paratyphoid
- C. Pox Young Birds\*

Vaccinate for Pox about 8 weeks before races begin. Paramyxovirus or Paratyphoid may also be used at this time. Where Paramyxovirus or Paratyphoid is endemic, youngsters may receive their first vaccination at weaning. Give boosters at recommended times after initial inoculation.

\* Vaccination for Pox may introduce the virus into a loft or to an area, so weigh this potential with the possible benefit in areas where pox is not endemic. **II.** Fecal Examination - direct smear and flotation. **A.** Helminths (worms) those species commonly

- found include: Ascarids (roundworms), Capallaria (hairworms), Tetrameres and Diaspharynx (stomach worms or stomach-wall worms). Aporina (tapeworms) and Ornithostrongylus (strongylids or strongyle worms). Treatments:
- Ivermectin (cattle wormer trade name Ivomec) - diluted 1:9 with popylene glycol and dosed at .1cc per bird orally. Effective against all worms except tapeworms. Dosage may need to be increased up to .1cc of straight Ivomec for stomach worms. Blood sucking arthropods may also be killed while there is a blood level of ivermectin in the pigeon. Ivermectin is also effective (perhaps more so) given by injection. It may also be very effective topically (applied directly on the skin).
- 2. Mebendazole (dog wormer trade name Telmintic) - dosed at 1/4 to 1/2 teaspoon of powder per gallon of drinking water for 3-5 days. (Do a repeat treatment in 21 days where worms are diagnosed). Use the higher dose when treating stomachwall worms and during cool weather when water consumption is down. Feather abnormalities and infertile eggs have been reported when using ten times the recommended dose. For this reason avoid using Telmintic during the moult and during egg laying.
- Levamisole (trade name Tramisol) dosed at 1000 to 1500 mg per gallon for one or two days. Use liquid or soluble powder as the tablets do not dissolve readily. Levamisole is sometimes poorly effective against Capallaria and will not eliminate stomach worms or tapeworms. Levamisole may also cause vomiting.
- Praziquantel (trade name Droncit) use 1/4 of a cat tablet per average size pigeon. Effective against tapeworms only.
- **B.** Coccida if present in significant numbers treat with:
  - Sulfachlorpyridazine (trade name Vetisulid) powder dosed at 2/3 to 3/4 teaspoon per gallon of drinking water for 3 to 5 days.
     Amprolium (trade name Corid or Amprol)

powder dosed at 1 tsp. per gallon of drinking water for 3 to 5 days. Note: Follow either of these treatments with 1-2 days of vitamins.

- Clazoril, a European drug, not yet availa ble in the U.S., may eventually be the drug of choice. Dosed at 1 tablet per pigeon.
   Nitrofurazone - less effective and not rec-
- Nitrofurazone less effective and not i ommended for coccidia.
- III. Pharyngeal and crop smears (immediate, direct saline smear) for trichomoniasis, and fresh fe cal or cloacal smears for Hexamitiasis. Hexamita, a flagellate, can cause serious diarrhea in young birds. Treatments (for either):
  - A. Emtryl dosed at 3/4 teaspoonful per gallon (less during periods of high water consumption) for 3 to 5 days. Emtryl has been taken off the market and the supply is limited, but is an excellent drug.
  - **B.** Ipropan dosed at 1/4 teaspoon per gallon for 3 to 5 days. More expensive but works well. This may also be withdrawn from market.
  - **C.** Spartrix available in Europe and will probable be available here soon. Will probably be the drug of choice. Pigeons dosed at one tablet per bird.
  - **D.** Flagyl (metronidazole) a prescription drug tablets may be finely crushed and mixed in water so that each pigeon receives 25-50 mg daily for 3 to 6 days.
  - **E.** Ronidazole A European product (4-6 mg/kg body weight for 6 days).
- IV. Fecal culture either of individual birds, or of a composite specimen from a compartment. The main pathogens are gram negative bacteria such as Salmonella or E. coli. E. coli may be present normally, but when it is cultured in large numbers and/or in pure culture it is considered a potential pathogen. If a pathogen is cultured, an antibiotic sensitivity (antibigram) should be performed to determine the appropriate antibiotic(s). If indicated Ammocillin trihydrate is a good drug of choice since it is bactericidal. It is dosed at 25-50 mg per pigeon per day for 2 weeks. Vetasulid is often very effective against E. coli. as is Apralan (apramycin). The latter is not absorbed from the gut so it may curb an out break, but will not be effective against a systemic infection. The same is also true of Neomycin.

- V. Blood smears for Haemoproteus and Plasmodium (stained with Wrights stain) in areas where these blood parasites are a problem, routine use of antimalarials may be indicated to
  - keep it suppressed. To actually affect a permanent cure, a pigeon reportedly must receive 10 mg of Atabrine daily for 30 days. The routine use of antimalarials in endemic areas involves medicating the drinking water with Atabrine (1-2 tab/gal), Primaquine (1 tab/gal) or Aralen (1 tab/gal) for 1-2 days each week during the race season.
- VI. Routine control of ectoparasites: Since water preparations do not penetrate the feathers well, it is better to use an insecticidal dust. Dusts must be applied carefully and thoroughly to be most effective.
  - **A.** Feather lice and mites can be controlled by regular dusting with Permethrin, Malathion or Carbaryl.
  - **B.** Pigeon flies (spread Haemoproteus) are more difficult but Permethrin dust applied every 2-4 weeks or Malathion dust applied weekly are effective.
  - **C.** Mosquitoes (spread Plasmodium and Pox) are a real challenge. Insecticidal strips hung in the loft are helpful. The amount to use varies greatly with size of loft and amount of ventilation, and is a best guesswork. Screening helps, but this is often very impractical in pigeon lofts.
  - **D.** Ivermectin applied as a spray mixed fresh using 1cc per quart of water has been shown to be fairly effective against lice but has failed to keep pigeon flies off.
  - E. Judicial use of insecticides in the loft (including nests) is often necessary to break the life cycle of some of these par asites.
- **VII.** Culture for Mycoplasmosis or Chlamydiosis when indicated treatment:
  - A. Erythromycin (Gallimycin) 25-30 mg per pi geon daily or Tylocin (Tylan) 50 mg per pi geon daily or Lincomycin (Lincocin) at 35-50 mg per pigeon daily for Mycoplasmo sis. Treat for 1-2 weeks.
  - **B.** Tetracyclines (without grit) at 50 mg per pi -geon daily for up to 6 weeks for Chla mydiosis. This may be effective against Mycoplasma also.