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DISSECTION OF BIRDS FOR SEX DETERMINATION (By Workshop Staff -- Reprinted from the Workshop Manual, Vol. I, 1962)

Although it is possible for a professional to sex a bird with a few quick flicks of a razor blade, the beginner may do well to follow a considerably slower process until he can improvise his own.

Following is a suggested procedure:

(1) Pluck feathers off abdomen from sternum to vent and well around on each side. (This gives a better picture of extent and shape of abdomen.)

(2) Make a skin incision (a razor blade will do) from sternum to vent. The skin is very thin, so cut carefully to avoid disturbing the viscera.

(3) Cut away all tissues which cover the organs, including the area you plucked along the sides. Scissors may be used for this.

Now visible: Heart, barely protruding from lower end of sternum. Posterior to heart, the dark red lobes of the liver. Between liver and vent: the gizzard, intestines, etc.

(4) Carefully remove these organs by lifting with tweezers (or eyebrow pluckers) and snipping with fine scissors or cutting with razor blade. Note: When you cut liver you will get a flow of blood. Rinse it out under trickle from water tap. Save gizzard to open and examine for diet.

(5) Locate kidneys -- two flattened lobes or masses housed on each side of spinal column posteriorly to heart.

(6) Locate apex (anterior or upper portion) of kidneys and examine for testes. These should lie directly above the adrenal glands which in turn lie on the kidneys. The testes appear whitish, while the adrenal glands are soft, amorphous masses and appear pinkish-red in comparison to the dark, firm red of kidney tissue.

(7) If testes are absent look for an ovarian mass consisting of many globules varying in size and lying in the area of the apex of the kidneys (there is only one functioning ovary in a bird.)

NOTE: In the breeding season it is often possible to sex birds positively. After breeding, however, reproductive organs atrophy to the extent that experts have trouble making identification by gross examination. Andrew J. Berger, in <u>Bird Study</u>, says: "One of the intriguing physiological phenomena in birds is the tremendous difference in size of the gonads between the breeding and non-breeding season. In many temporate zone species, the testes of a breeding male may be from several hundred to 2000 times the size of those in a non-breeding male." 000

Life Size Flicker O from Specimen found 3/31/62 Stephen T. Harty

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Top of Sternum

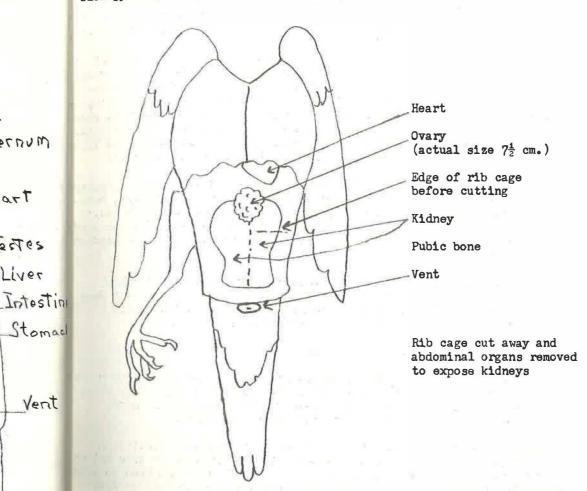
Heart

Testes

-Liver

Vent

EQUIPMENT: Household equipment such as a razor blade, cuticle scissors, tweezers and a corsage pin are adequate. Well-stocked toy stores now carry dissection kits for approximately \$2.50. A helpful 10-power hand lens is available from Ward's Natural Science Establishment, Inc., Box 1712, Rochester 3, N.Y., for \$1.50. Or contact your local high school biology teacher.



4/21/62 Wilde R. Mellencamp PURPLE FINCH -- ADULT FEMALE Pardon our dust

We're hurrying to the EBBA meeting at E. Stroudsburg April 19-21, 1963