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**A Technique For Vasectomizing Birds.**—The Masked Bobwhite (*Colinus virginianus ridgwayi*) was once common over much of northern Sonora, Mexico, and southcentral Arizona. Because of extensive habitat alteration, the bird was reduced to a few remnant populations in Sonora (Tomlinson, 1972), and until recently, reintroduction efforts, begun as early as 1937, were largely unsuccessful (Ellis et al., 1978). Vasectomized wild-caught Texas Bobwhite (*C. v. texanus*) males were used as surrogate parents for the Masked Bobwhite chicks. In our program, it was essential that there be no possibility that the foster parents interbreed with the endangered birds in subsequent years. Although Bray et al. (1975) vasectomized Red-winged Blackbirds (*Agelaius phoeniceus*) by precloacal ligation, we used laparotomy and surgical removal of a segment of the vas deferens to assure permanent sterility.

The procedures used in restraining and surgically opening the quail are much like

those described by Bailey (1953) and Risser (1971). Pre-operative surgical procedures are as follows:

1. Fast the birds up to 12 h to reduce the intestinal volume.
2. Hood the bird; with one rubber band around the legs and another around the wings, attach the bird to metal hooks 25 cm apart on an operating board.
3. Pluck the lateral abdominal area and moisten the surgical site with alcohol. Using sterile instruments, retract the skin just anterior to the thigh. Make a small vertical incision with a scalpel, and then enlarge the opening with scissors.
4. Hold the thigh posteriorly. Insert blunt-blunt scissors through the intercostal muscles between the last two ribs; spread the scissors parallel to the ribs extending the opening to 2 cm.
5. Insert a small retractor and spread the ribs 2.0–2.5 cm.
6. Tease away the air sacs exposing the testis and vas deferens (hereafter, vas).
7. Direct a high intensity, narrow-beam light into the cavity.
8. Lift the posterior base of the testis with a blunt probe and carefully tease the vas from the posterior vena cava with a sharp probe.
9. Lift the vas and clamp it with a hemostat at the base of the testis. Tear the vas from the testis with a blunt probe. To insure removing a sizeable segment of the vas, clamp it with forceps as far as possible (usually 5–20 mm) from the hemostat and tear away. In the typical operation, 3–15 mm of the vas will be removed. An antibacterial agent such as nitrofurazone can be applied to the surgical site following the vasectomy.
10. For bilateral vasectomy, procedures 3–9 are repeated contralaterally.
11. After bilateral operations are completed, place the bird in a darkened chamber at about 28°C.

Surgical closure of the operating site is not required because the thigh muscles naturally cover the abdominal opening after the bird is removed from the stretched position; however, skin closure with 4-0 chromic gut can be performed. With experience, procedures 1–10 can be completed in about 7 min. To decrease discomfort for the birds, they may be anesthetized. Risser (1971) applied ethyl chloride (topical anesthesia) a few seconds before operating. When anesthesia is indicated, the bird can be maintained at a light surgical plane using 5–10 mg/lb of ketamine HCl with 10% acepromazine maleate administered intramuscularly.

Of 195 Texas Bobwhites, 92% survived the vasectomy. To test the results of the surgical procedure, 14 Eastern Bobwhites (*C. v. virginianus*) were vasectomized (11 April 1977) and each male was housed separately with two females. The birds were exposed to a 24-hr photoperiod from 15 October 1977 to 1 January 1978. At the conclusion of the experiment, eggs had been laid in all compartments with a total of 196 eggs produced. After 10 days of incubation, the eggs were opened and examined. None of the eggs had a detectable embryo, whereas a control group of Eastern Bobwhites had a fertility rate of 85%.

On 3 March 1978, a postmortem examination was conducted on 10 of the males. No gross abnormalities associated with the surgical procedure were found. The testes of some birds appeared to be reproductively active whereas others were apparently in various stages of recrudescence, with measurements of the left testis averaging 15.5 mm (9.6–20.0) by 9.0 mm (5.5–11.5). The size and length of the vas varied between birds, depending on the sexual stage of the individual at the time of the necropsy and on the amount of tissue surgically removed. The epididymis and distal part of the vas were generally intact, with the anterior 5–20 mm of the vas typically absent.

Thus, vasectomy appears to be a practical method for eliminating the risk of cross-breeding when conspecific foster parents are used. The technique should be applicable to other foster-rearing programs, although some species may not survive as well as the Bobwhite under the stress of handling and surgery.

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