

NON-NATIVE GAME BIRD MANAGEMENT GUIDELINES

Overview

Three species of non-native game birds are currently established in Arizona and have hunting seasons specifically regulated by Commission Order. Chukars were introduced by the Department in many locations from 1942 to 1963, but only established in suitable habitats north and south of the Colorado River. Recently, populations in Utah appear to be expanding to the northern portions of the Arizona strip, as well. Chukars will likely continue to follow the expansion of exotic cheatgrass to the south, limited only by water distribution, drought cycles, and adequate escape terrain. Ring-necked pheasants were released in the 1940s and again between 1967 and 1972 by the Department, and at other times and places by private interests. Few of these populations persist. A persistent population of pheasants occurs in the agricultural areas near Yuma. A small persistent population of California Quail near Springerville resulted from a release from a private game bird farm in 1960. These birds occupy <10 miles of the Little Colorado River drainage and appear to be limited to this area by lack of adjacent suitable habitats.

Procedure 1: To determine annual population trends of non-native game birds and provide this information to the hunting public.

- A. Regional personnel should determine if opportunities exist to take advantage of established non-native game bird populations to provide additional hunting recreation.
- B. Regional personnel may conduct surveys in their respective areas of responsibility. Other personnel may be assigned to assist in surveys when such an arrangement is approved by the Regional Supervisor.
- C. For ring-necked pheasants, call ("crow") count surveys are the traditional method of monitoring breeding population trends. Survey routes should be run at least twice. The second count should follow the first by 10–14 days. If there is a large discrepancy between the 2 counts, a third count should be made. Typically, April is the best time to run pheasant surveys. (A protocol for conducting pheasant crow count surveys can be found in Appendix A).
- D. Regional Game Specialists should maintain a file of route descriptions and survey data, if collected.

Procedure 2: To collect data on harvest and hunt success of non-native game birds that have an open season.

- A. Regional personnel should attempt to contact non-native game bird hunters in the field to determine hunt success and take.

B. If feasible, a questionnaire can be sent to non-native game bird hunters. If a hunt permit-tag is required for the hunt, then a mailing list of all hunters is readily available.

Procedure 3: To use survey and harvest data to formulate annual hunt regulations. Field personnel should forward completed survey forms to the Regional Game Specialist within two weeks of completion of the surveys. Comparison of these data to previous years' data, along with estimated hunt success rates, should be used to set new hunt regulations.

Procedure 4: To identify land use activities that may adversely affect established non-native game bird populations, or conversely, that may be negatively affected by non-native game birds. Determine if opportunities exist to preserve or enhance the habitat of established non-native game birds by coordinating with land management agencies and private landowners. Any action chosen should not negatively impact native wildlife populations.

Procedure 5: Evaluate areas for the possible introduction of non-native game birds into areas of suitable habitat, to include mountain quail in the Hualapai Mountains. Areas of suitable habitat should be evaluated and the land management agencies contacted to determine if a transplant is acceptable. If areas are deemed suitable for releases the Wildlife Manager should complete all necessary requests and forms.

Appendix A. PROCEDURES FOR CONDUCTING PHEASANT CROW COUNT SURVEYS

Adapted from Arizona Small Game Investigations, W53R18-WP3-J6, 1968.

States with established populations of pheasants use crow counts extensively to determine a breeding population index. Crow count surveys should be conducted in April, because this is apparently the period of maximum crowing intensity.

Set up a crow count survey route in areas where birds are known to exist. Survey routes are preferably 20 miles in length; however, it can be shorter if the area is small, or longer if needed. The important factor is to use the same routes every year to provide trend information on population fluctuations. Each route should be named and mapped and described. Starting and finishing landmarks should be identified and recorded. If possible, locate routes in areas comparatively free of interfering noises, i.e., running water, pumps, traffic noise, etc. A trial run will help to determine this and will help the Wildlife Manager in becoming familiar with the two-syllable crowing of a cock pheasant.

Begin the route at the starting point exactly 30 minutes before local sunrise.

Counts should be made at one-mile intervals, starting one mile from the starting point. Stop the car and get out taking care not to slam the door or make other loud noises. Listen for exactly two minutes for individual cocks crowing and the total number of crows heard, counting the regular two-syllable crowing of cock pheasants. Record this information and drive one mile to the next counting station, without stopping between stations.

Record all pheasants seen along the route.

When rain is falling or strong wind is blowing, the count should be delayed. Counts should not be taken when wind velocity is more than Beaufort 3 (i.e., leaves and small twigs in constant motion; wind extends light flag).

Pheasant crow counts should be made at least twice along each route as close together as time and conditions permit. If the 2 counts closely agree these will be adequate. However, if there is more than a 10 percent discrepancy, a third count should be made.