

is not sufficient to recommend standards for these factors. It should be noted that the committee recommends the recording of these factors for each count. Therefore, through compilation of these data within the next few years, the committee would be in a position to suggest a standard flush count technique.

Evaluation of experimental releases of Black Francolin and Bamboo Partridge in the Southeast is in the preliminary stages. Incidental observation reports of persons working or residing on the release area are recorded. Bird dogs will effectively work each of these species. Due to the distinctive call of both the Bamboo Partridge and Black Francolin, a call count survey should be effective. Because of the small amount of knowledge on the behavior of these species on new release areas, refinements of census techniques are mandatory before reliable estimates as to the population status can be obtained.

Such census procedures as the call count survey and man-dog-hour flush index are adaptable to use on relatively small areas having low and dispersed populations.

Although several other types of census techniques are employed in "pheasant" states, the committee agreed that the above mentioned procedures be recommended to the Southeast as standard basic techniques for evaluating experimental releases, especially while establishment of populations is in the experimental stage. It is hoped that these recommended procedures would stimulate continued experimental work on census techniques at the individual project level.

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INTRODUCTIONS OF THE BLACKNECK PHEASANT GROUP AND CROSSES INTO THE SOUTHEASTERN STATES

Presented at the Seventeenth Annual Meeting of the Southeastern Association of Game and Fish Commissioners September 30, October 1, 2, 1963 — Hot Springs, Arkansas¹

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"He only is exempt from failures who makes no efforts"—Whately.

Introductions of foreign game birds into the Southeast have been and will be fraught with "failures." At least we are making a good effort, and who knows what our success will be. Some of the most encouraging prospects lie with our blackneck pheasant group and crosses involving this group. This group may be better known to some as the Iranian pheasants. Of the four subspecies that it contains, we are primarily concerned with the Eastern (*Phasianus colchicus persicus*) and the Western (*Phasianus colchicus talischensis*). Releases have involved pure strain individuals and crosses with the northern ringneck (*Phasianus colchicus torquatus*).

It would be presumptuous to draw any final conclusions here and now. Not enough time has elapsed since initial stockings nor have all

¹ Prepared for the program session allocated to the Foreign Game Committee of the Southeastern Section of the Wildlife Society.

TABLE I
PURE STRAIN TALISCHENSIS RELEASES

State	Year	Number Released	Source	Direct or Gentle Release	Month Released	Area	Results to date
Alabama		None					
Arkansas		None					
Florida	1962	85	Farm	Gentle	Feb.	Raiford	4 flocks, 3 mile movement some still around
Georgia		None					
Kentucky	1962	18	Farm	Direct	April	Henderson Co.	Mixed with <i>talischensis</i> x ringneck birds on same area. Results have been encouraging on this area.
	1963	104	Farm	Direct	April	Henderson Co.	
Louisiana		None					
Maryland		None					
Mississippi		None					
Missouri		(Presently propagating birds for release)					
North Carolina		None					
South Carolina		None					
Tennessee		(First releases expected in the fall of 1964)					
Virginia	1961	296	Farm	Gentle	Apr.-Oct.	New Kent Co.	Favorable. Reproduction evident. Favorable.
	1962	67	Farm	Gentle	Apr.	New Kent Co.	
	1963	632	Farm	Direct	Apr.-Oct.	King Wm. Co.	

of the likely habitats been tested. In some cases, insufficient numbers of birds have been liberated for a fair trial. Some follow-up studies have yielded discouraging findings, while others allow for considerable optimism. The latter are encouraging and add impetus to our endeavors. A word of caution. Let us always exercise discretion and good judgment when analyzing and publicizing our findings. Sportsmen's ears are ever alert to the new and exciting and their eagerness for action is often only exceeded by the amount of pressure they apply on a game agency to "jump on the bandwagon and get going"! Our past is littered with junked programs that may have been eliminated by a more restrained and experimental approach. Exotic introductions are popular and spectacular and can quickly become uneconomic drags on the budget if allowed to do so. However, this has not occurred in the Southeast yet.

The contribution of the Foreign Game Introduction Project of the U. S. Bureau of Sport Fisheries and Wildlife to the Southeastern Region is hereby recognized. Besides securing the original Iranian birds used in the program, a good deal of helpful advice has been supplied regarding propagation methods, selection of release sites, and follow-up studies.

The writer is indebted to the individuals in member states who graciously completed questionnaires which supplied the following data on propagation, releases, and findings. Appreciation is also expressed to Dr. Gardiner Bump for permission to use data contained in his Report No. 12.

Since 1960, five states have reared 3,630 pure strain *talischensis* birds. Three have released 1,202 over the past two years (Table I). Favorable results have been reported in Kentucky and Virginia. Birds are still present in Florida.

Six states reported raising 13,262 of the *talischensis*-ringneck crosses since 1960. Propagation centers reported receiving more eggs per hen when dealing with the crosses. Eight states released 14,462 birds, beginning in 1958 (Table II). The direct release method was used in five states. Florida and Missouri used the gentle procedure, which generally entails holding the birds in pens on the release area at least overnight and allowing them to emerge at will when the doors are opened. Virginia used both methods and developed a portable pen which yielded excellent results. Most of the liberations were made in the spring and fall. Results have been varied. Florida reported the birds disappeared on one area, while on another survival was good. Alabama reported good results. Arkansas reported broods observed. Broods recorded on an area in Missouri have shown a decline each year since 1960 when a high count of 46 was obtained. Releases have been discontinued there. South Carolina reported less birds and broods in 1962 than in the previous year on one area, however, some birds still remain. Tennessee reported a slight year-to-year decrease but qualified their answer by saying that it was too early to tell. Kentucky releases were made on an area where approximately 1,900 birds (ringnecks, Mongolian, Formosan, and crosses) were introduced in the period 1951-56 in conjunction with a rather intensive study. A total of 47 broods was recorded during the seven-year period, 1953-59. Eighty-eight *talischensis*-ringneck broods have already been recorded in two breeding seasons (1962-63) following liberations of 1,188 birds. The results to date have been quite encouraging. Virginia reported the best success and stated that the birds were established and building to large populations on several areas. It may be of interest here to note that on July 1, 1963 the Foreign Game Committee made an early morning tour of the Virginia Sandy Point area and counted 111 birds, including 13 broods involving 77 chicks, in a two and one-half hour period. It was a thrilling experience made all the more remarkable by the knowledge that releases on this area were confined to only 300 birds in the fall of 1958 and an additional 400 in the spring of 1959. However, it must be pointed out that this is a rather small area isolated by woods and water with a unique intensive agriculture for that particular section of the state. Principal crops are wheat, corn, and soybeans. Cover is present in fencerows, hedgerows, odd areas, and strips of timber.

TABLE II
TALISCHENSIS X RINGNECK RELEASES

State	Year	Number Released	Source	Direct or Gentle Release	Month Released	Area	Results to date
Alabama	1960	35	Farm	Direct	Nov.	Limestone Co.	Good
	1961	42	Farm	Direct	Jan.	Limestone Co.	Good
	1962	37	Farm	Direct	Jan.	Limestone Co.	Good
	1962	181	Farm	Direct	Nov.	Limestone Co.	Good
	1963	163	Farm	Direct	Apr.	Limestone Co.	Good
	1963	67	Farm	Direct	July	Limestone Co.	Good
Arkansas	1963	206	Farm	Direct	Aug.	Limestone Co.	Good
	1962	44	Farm	Direct	Mar.	.....	2 broods seen in Rainey Brakes area; 4 adults noted on Watten-
	1962	44	Farm	Direct	Mar.	.....	saw area. Adults observed
	1962	100	Farm	Direct	Mar.	.....	throughout the summer; 4 broods
	1963	97	Farm	Direct	Mar.	.....	reported in August, 1963
Florida	1960	40	Farm			Exp. Grasslands farm	Disappeared
	1961	14	(Va.)	Gentle	Feb.	"	Disappeared
	1961	25	(Va.)	Gentle	Feb.	Jim Woodruff	Good survival. Some repro-
	1962	85	Farm	Gentle	Feb.	GMA "	duction. 2 broods of 7 and 8 observed Dispersal—8 miles Several broods observed.
Georgia		(Plan to release 250 per year for 3 years in north Georgia starting in September of 1963)					
Kentucky	1961	444	Farm	Direct	Summer	Henderson Co.	Dispersed up to 4 miles
	1962	415	Farm	Direct	Apr.-Oct.	Henderson Co.	two nests, 36 broods, dispersal—19 miles
	1963	429	Farm	Direct	Apr.-Sept.	Henderson Co.	Nine nests, 52 broods Results to date encouraging

Louisiana			None					
Maryland			None					
Mississippi			None					
Missouri	1959 1961		884 —	Farm Farm	Gentle Gentle	Sept.-Nov. Feb.-Apr.	Chillicothe Chillicothe	1959 — 11 broods 1960 — 46 broods 1961 — 34 broods 1962 — 16 broods Crowing-cock indices substantiate this trend. 1963 — data not yet available.
North Carolina			None					
South Carolina	1961		154	Farm (Va.)	Direct	Apr.-Dec.	Eutaw Springs	Many birds and 7 to 8 broods reported in summer 1961. Less birds and broods 1962.
	1962 1963		47± 23	Farm Farm	Direct Direct	Summer March	York Co. Eutaw Springs	Not reported. Some birds still present as evidenced by crowing and sight observation. 5-6 mile dispersion is common
Tennessee	1961 1962 1962 1962 1963		573 648 961 694 1,850	Farm Farm Farm Farm Farm	Direct Direct Direct Direct Direct	..... Aug.-Oct. Aug.-Oct. Aug.-Oct. Aug.-Oct.	Henry Co. Lauderdale Sequatchie Co. Henry Co. Henry Co. Lauderdale and Franklin Counties	Slight year to year decrease. Broods seen on all areas. Spring crowing counts taken. Too early to tell.
Virginia	1958 1959 1960 1961 1962 1963		300 1,972 1,638 1,240 302 713	Farm Farm Farm Farm Farm Farm	? Either Either Either Either Direct	Fall Apr.-Oct. Apr.-Oct. Apr.-Oct. Apr. Apr.-Oct.	Charles City Co. Charles City Surry, Prince George, Richmond & Campbell Co.'s Campbell-Nottoway	Birds established and building to large populations on several release areas. Reproduction good. Success evident

TABLE III
PURE PERSICUS RELEASES

State	Year	Number Released	Source	Direct or Gentle Release	Month Released	Area	Results to date
Alabama		None					
Arkansas		None					
Florida		None					
Georgia		None					
Kentucky	1962 1963	100 24	Farm Farm	Direct Direct	Sept.-Oct. April	Christian Co. Christian Co.	Rather poor. Crosses with ringnecks also liberated on same area.
Louisiana		None					
Maryland	1962 1963	41 23	Farm Farm	Direct Direct	March March	Wicomico Co. Wicomico Co.	Birds and reproduction noted. Not known.
Mississippi		None					
Missouri	1960 1962	83 51	Farm Farm	Gentle Gentle	Mar. Mar.-Apr.	Rich Hill Rich Hill	1961 — 3 broods Too early to determine results 11 broods in 1962. Crowing count indices low. 1963 — data not yet available
	1963	132	Farm	Gentle	March	Rich Hill	
North Carolina		None					
South Carolina		None					
Tennessee			(First releases expected in the fall of 1964)				
Virginia	1961 1962 1963	534 458 694	Farm Farm Farm	Gentle Either Both	Apr.-Sept. Apr. Apr.-Sept.	Orange Co. Orange Co. Cumberland Co.	Good numbers of birds observed. Reproduction excellent. Favorable.

Four states reared 5,372 of the pure strain *persicus* type. A total of 2,140 was released in Kentucky, Maryland, Missouri, and Virginia in the past four years (Table III). Tennessee expects to initiate liberations in the fall of 1964. Virginia reported good numbers of birds observed and reproduction excellent. Crowing count indices were low in Missouri. Reproduction was noted in Maryland. The pure strain birds were mixed with crosses on one area in Kentucky and results have been rather poor so far.

A total of 16,787 of the *persicus*-ringneck pheasants was reported raised by five states since 1960. Here too, egg production was greater than for the pure strain. Six states reported releasing 23,941 individuals since 1959 (Table IV, P. 118). As with the *talischensis* birds the results have been varied. Arkansas reported several adults and broods observed prior to October 1961. Kentucky had some reproduction but termed the results rather poor. Maryland recorded good, fair, and poor results. Increasing brood counts and crowing-cock indices offered promise in Missouri. Tennessee reported encouraging findings in one county. Virginia experienced low reproduction and a decline in the population.

Five hundred and seventeen birds of a *talischensis*-*persicus*-ringneck cross have been released on two areas in Virginia in the 1959-62 period (Table V, P. 119). No results were given.

To sum up, 42,262 pheasants of the blackneck group (including crosses) were reported released in the Southeastern states in the last six years. Additional 1963 fall releases are anticipated. Results have varied from complete failures to reported successful establishment from state to state and within states. It would appear that we need to take a close look at the environment where the birds have shown a marked degree of success and evaluate the various components. Subsequent introductions can then be made in all potentially successful areas. Where we have met with failure, we should try other likely habitats until a true test for a particular subspecies or cross has been attained.

Although details of the habitat requirements of the blackneck group are not too well known, it is believed that "clean farming" trends and increased acreages devoted to permanent pasture are factors generally detrimental to them. Potential pheasant habitat may be slipping away from us.

The Foreign Game Committee stands to serve a practical and important function to blackneck introductions and follow-up investigations. This involves the setting of suggested standards and procedures for determining population levels (i.e., uniform crowing-cock surveys, field censuses) so that state-to-state comparisons can be made. It may also serve as disseminator of pertinent research findings which will be of great benefit and interest to field investigators and administrators throughout the Region. It is a pleasure to report that these initial steps have already been taken.

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THE BLACK FRANCOLIN

BY ROBERT E. MURRY, *La. Wildlife and Fisheries Commissioner*

While a critical evaluation of the present status of the black francolin (*Francolinus francolinus*) is needed, it is too early to give more than a rather sketchy report at this time.

The black was recommended for trial liberation by personnel of the Foreign Game Introduction Program, of the Bureau of Sport Fisheries and Wildlife. Releases of wild trapped birds were made in Alabama, Arkansas, Florida, Kentucky, Louisiana, Oklahoma, and Virginia be-