In many respects this species shows promise of being one of the better groups for many sections of the Southeast. As has been pointed out a reliable evaluation would be premature at this time, but progress looks good and two or three more years should show what may be expected.

The newest arrival of the pheasant group to Virginia is the white crested kalij, *lophura leucomelana hamiltonii,* and comes from the Southern flank of the Himalayas range of India and Pakistan at elevations from 2,000 to 8,000 feet. Its native range is rough and rugged and snowfall is light. Scientific Report—Wildlife No. 62, by Bump and Bohl, covers in detail much information on the species that cannot be included in this report due to limited time and space.

The first shipment of birds to arrive in Virginia was in 1961, and a successful game farm program was set up from which a substantial number were held for game farm breeding and 138 birds were stocked in April, 1963. The release was made in a rugged type range in the Jefferson National Forest in Giles County at an elevation of approximately 3,000 feet, and to keep a check on the birds in this dense mountain county is a very difficult task. The game manager on the area and timber operators working the range report that adult birds are being seen over a radius of five miles from point of release, but only one brood has been observed, and this moved into heavy cover so quickly that a count could not be made.

These circumstances prompted the Virginia Game Commission to explore the possibilities of the transistor radio technique for checking. From information that was available it appeared that such a system would be practical, and might also reveal information that would otherwise take months, and possibly years to accumulate.

Transmitters of suitable size and reasonable life expectancy were developed and receivers were built to recommended specifications. It was found by field check that the receivers were not satisfactory, being incapable of picking up the signals for a distance that would be practical in the study. This type had to be abandoned and a different unit is being developed. The one that now shows promise can be used in a twofold manner, in which the signals can be received and also used for communication by the operators. The details of this construction are not yet available, but favorable tests have been made indicating its possibilities as quite satisfactory. More tests are necessary and any developments on this operation will be made available to anyone interested in this type of study. It is expected that these units will be ready for use when the 1963 fall releases are made and may reveal valuable information on movement and survival of the birds. Another test will be made on a group of hens to be released just prior to the spring breeding season in an effort to obtain information on nesting and possibly brood checks which might otherwise be a long and difficult task to accomplish.

1963
REPORT OF THE FARM GAME COMMITTEE SOUTHEASTERN SECTION — THE WILDLIFE SOCIETY

The Farm Game Committee met in Montgomery, Alabama, August 20 and 21, 1963. Members in attendance were: Lee K. Nelson, Kentucky Department of Fish and Wildlife Resources; Dr. Lloyd G. Webb, Clemson College and South Carolina Wildlife Resources Department; Pete Farrar, Southeastern Field Representative, National Wildlife Federation; and Edward G. Sullivan, U. S. Soil Conservation Service, Mississippi. Robert W. Murray, Florida Game and Freshwater Fish Commission, was not able to attend the meeting but did make valuable contributions by letter.

The first order of business was to review and discuss the Farm Game Committee reports of the past several years. This was a revealing task. A number of facts are evident and should be pointed out.

We have discussed activities, collected data, sent out questionnaires,

written for opinions from the experts, and made recommendation after recommendation in our past reports. We have considered our problems from the standpoint of techniques — food, cover, land management, ecology, and the lack of same; from the standpoint of providing hunting space — purchase of public hunting areas and lease of public hunting areas; from the standpoint of sportsman-landowner relationships; information and education; the agricultural subsidy programs; the efficient harvest of our game; and the "give away" of planting materials.

Farm game management techniques have been pretty well worked out. Certainly these techniques are being improved and will continue to be improved. We are all for that.

The Southeastern states have done a commendable job of providing public hunting areas through lease agreements and purchase. Some states count these areas in millions of acres. We're for that too.

The sportsman-landowner relationship is still being kicked around. As we ride across the country and see the ever-increasing number of posted signs, we wonder if this relationship hasn't backfired. Of course, we had rather see it get better.

The information-education people are still hard at work. A glance through any of the State Conservation Department magazines reveals a job well done.

The agricultural programs — Federal cost sharing under the ASCS, land retirement programs and others — are more workable now than in the past. More and better game management practices are available to farmers under these programs. More of them are being used. This is all encouraging.

Our 1960 Report showed from figures available then that six million dollars had been spent in the Southeast by State Conservation departments on "give away" plant material programs. It was further stated that the true figure, including such things as administration and all other expenses involved, would be at least three times this amount. Some of the states still participate in some type of plant material program to give or sell at cost to landowners.

This all makes an impressive list of accomplishments. This is progress, we think. But despite all this, the sportsman is still looking for a place to hunt. He is finding less game and more competition for hunting space.

Where do we stand? The Committee feels that we are still faced with the biggest problem of all in farm game management, and this is *getting the farmer and landowner to practice game management.* Landowner incentive is the "most used" word in past committee reports. The 1960 Report stated that "access to private lands is the key to farm game hunting." The 1961 Report said and underscored "Lack of incentive on the part of the landowner to practice game management is a major factor." The 1962 Report dealt at length under a separate heading of "landowner incentive" and suggested possible ways of dealing with it.

But aren't we kidding ourselves? Can we look a farmer in the face and ask him to grow game for us so the sportsman can have a place to hunt?

We are all familiar with the changing trends in farming over the past years. We know the trends in modern agriculture are not in favor of our farm game. Farmers are not going to favor game except in a few cases where they have a personal interest, unless it is made profitable for them. If the farmer is to make a profit from practicing game management, someone has to pay the tab. Game departments can no longer shoulder the burden alone by providing public hunting areas. This leaves the sportsman responsible for paying his way.

There is evidence that the sportsman is ready and willing to assume this responsibility. Much of the deer, turkey, and waterfowl hunting has been on this basis for some time. Shooting doves under a fee system is gaining in popularity every year. Fishing in private waters for a fee is a well established practice. The gaining in popularity of shooting preserves is further evidence in favor of fee hunting.

The present Washington Administration's push on outdoor recreation is further reason to look this business of fee hunting squarely in the

face. Definite responsibilities for providing recreation on private lands have been assigned by the Secretary of Agriculture. The U. S. Soil Conservation Service will have a big hand in planning these projects with the farmer. Farm game hunting will be a part of this recreation program. This seems to be an appropriate time for the State Game and Fish Agencies to join hands with the agricultural agencies that deal directly with the farmer. This may be the opportunity we have long needed to begin a farm game program that will work. It may help solve the two problems that have stood in the way of farm game managers from the beginning. These are: to induce the farmer to practice game management, and induce him to invite the sportsman on his farm instead of posting his land against him.

With the above justification for our thinking, the Farm Game Committee feels that we can no longer make recommendations, write reports, and then sit back and hope something happens. We must take positive action. Whether we believe firmly that fee hunting will solve our problems or not, it is upon us. Do we, therefore, have any alternative but to take hold of it and channel it in a direction that will provide hunter opportunity for the masses of average sportsmen rather than allowing it to drift into a system of private leases that will provide hunting for a select few?

The committee makes the following proposal to the commissioners, administrators, project leaders, and farm game biologists of the Southeastern Region:

1. Initiate a pilot project in each state to work with selected farmers on a fee hunting system. The project will be operated for profit by the landowners involved. Make this a test study that will give the profession much needed information on this subject.
2. Let the farm game biologist or project leader select the area in cooperation with any other agency that can lend a hand. People who can help are: county agents, vocational agriculture teachers, Soil Conservation Service personnel, and county game wardens.
3. The area may consist of one farm, a group of farms or even a community-wide project.
4. Local community development clubs may be a good starting point. The county agricultural workers are familiar with these local clubs in each county. They can offer invaluable assistance and leadership in such a project if they are sold on the idea.
5. When areas have been selected and agreements reached, the game biologists must make adequate plans for a farm game program. Plans should include provision for all species of game adapted — doves, quail, rabbits, squirrels, and even fishing — for a well-rounded program. Planning should include cover, food, method of harvest, fee to charge, and division of fees if several landowners are involved. Provision might be made to furnish appropriate planting materials for this trial project. Liability insurance for the owners will be necessary.
6. The area should be appropriately marked and publicized.
7. The farmers involved should understand that this project is not intended to replace their cash crops or bring in large sums of money. It would be designed as a supplement to their farming operation
8. The project should be planned to answer specific questions on the attitude of the landowner and sportsman, fee to charge, and many other unforeseen problems that will arise.
9. The game department's financial participation is not suggested to be of a permanent nature. It is anticipated that such projects, if proven successful, would be perpetuated by landowners either individually or collectively. Technical assistance and guidance to these operators should continue to be provided, but the agencies involved should never lose sight of the fact that these are landowner owned and operated projects.

The committee chose this approach this year as a change from the routine of rehashing our many problems. We sincerely hope this will

cause some serious thinking by the members of our profession. We certainly do not offer this as the solution to all our problems but as a starting point from which we may be able to move into a positive approach to our farm game program.

Respectfully submitted,
Lloyd G. Webb
Lee K. Nelson
Robert W. Murray
F. H. Farrar
Edward G. Sullivan, Chairman

THE EFFECT OF STAND DENSITY ON THE ACORN PRODUCTION OF TURKEY OAKS[1]

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The longleaf pine-turkey oak *(Pinus palustris-Quercus laevis*)* association occupies a considerable land area in north and central Florida, particularly inland. Some of Florida's densest deer populations are located in this type of habitat. Turkey oak is dominant when pine has been removed and burning is infrequent, while pine is common where burning is frequent. Several other trees which are often locally abundant include bluejack *(Quercus cinerea)*, liveoak *(Quercus virginiana)*, and post-oak *(Quercus stellata)*. Turkey oaks are not only the most common oaks, but contribute a greater quantity of mast for wildlife than the others. Understory vegetation consists primarily of wiregrasses *(Aristida* spp.), gopher-apple *(Geobalanus oblongifolius)*, huckleberry *(Vaccinium myrsinites)*, dog-fennel *(Eupatorium* spp.), and legumes.

The principal soil type in this association is the Norfolk series. The surface is typically a grey, fine sand with a yellow subsoil. The soil is well-drained, slightly acid, and usually free of lime. The water table is normally lower than four feet from the surface.

This type of land with its rolling topography, park-like appearance, and good drainage is particularly suited to real estate development.

[1] A contribution of Pittman-Robertson Federal Aid Project W-41-R.
* Plant names follow Small. Lit. cited.