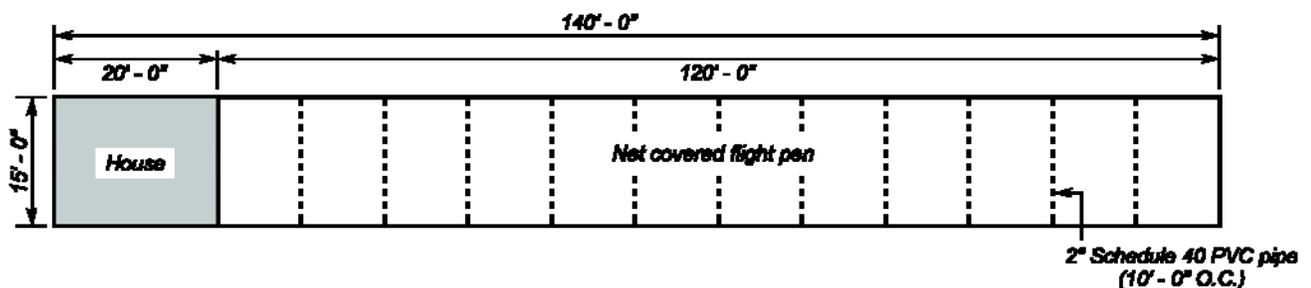


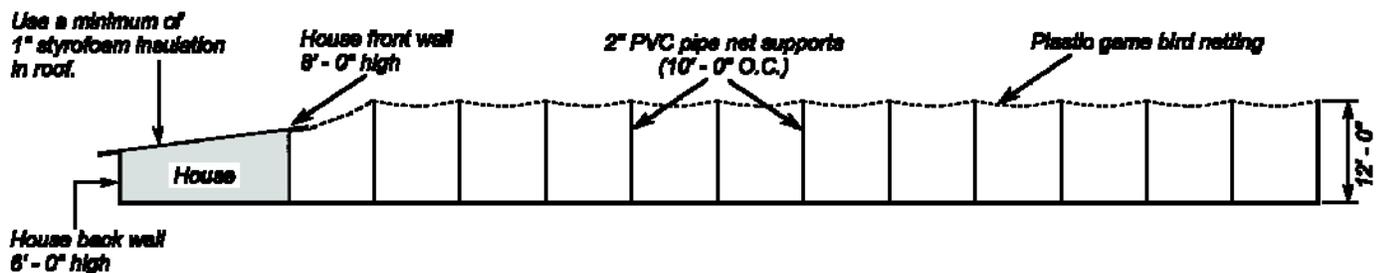
## Game Bird Flight Pen Plan

Shown below are the basic design for building a Bobwhite Flight Pen facility for housing 1,000 to 1,200 quail. This design is part of a series of facility plans to produce flight-conditioned Bobwhite quail for shooting preserves. Click on each diagram for an enlarged view and additional details.

The diagrams can be printed from this web page or enlarged versions can be printed from the downloaded graphics files. The files can also be enlarged, viewed and printed using a graphic editing program.



*Floor Plan of Flight Pen for 1,000 to 1,200 Bobwhite Quail*



*Side View of Flight Pen*



# Instructions To Accompany Bobwhite Quail Flight Pen Plans

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The gamebird plan shown is designed to accommodate 1,000 to 1,200 bobwhite quail during the flight conditioning phase of their growth. The plan is of very simple construction and consists of a framework of hoops made from lengths PVC pipe that are covered by gamebird flight pen netting. The following items discuss options and concerns relating to the construction of these facilities.

- 1. The structure is designed for environmental conditions commonly encountered in Mississippi. The 15' x 20' house provides a minimum of .25 ft<sup>2</sup>/bird of interior floor space and the outside pen provides a minimum space of 1.5 ft<sup>2</sup>/bird. The design is not recommended for producers in northern climates unless modified to provide extra structural support against heavy snow and ice loads.**
- 2. Build the facility on a well-drained site that does not allow any pooling of rain water after showers. Fill-in or elevate the soil surface of the pen at least 1- to 2-feet higher than surrounding terrain. The site should not have housed any commercial poultry within 1-2 years prior to construction.**
- 3. When the site is ready for construction, build the house and develop access to utilities supplies. The insulation of this building must conform to the basic recommendations as stated in the plans for constructing the quail brooding house. Be sure to protect insulation against bird damage and install a vapor barrier to avoid moisture condensation and insulation water damage.**
- 4. Mark locations for footings and anchor pipes of the pen framings. Twelve pairs of holes are aligned in two rows that are 15-feet between rows and 10-feet apart within each row. Dig footing holes 2- to 2<sup>1</sup>/<sub>2</sub>-feet deep, pour concrete into the holes, and insert the footer pipes into the concrete while leaving 2-feet or pipe extended above ground. Be sure that the pipes are vertically plumb on all sides. Allow the concrete to cure for several days before continuing pen frame construction.**
- 5. Each arch in the pen is built from one and one-half sections (20' per section) of "Schedule 40" 2-inch PVC water/drain pipe. Properly glue the two pipe sections together to form a 30-foot framing member. The arch framework is formed when each end of the PVC pipe is slipped over a metal pipe anchor located on opposite sides of the pen. When properly formed, the center of the arch extends about 12-feet above the floor of the pen. Additional strength to the pen framework can be added by installing a continuous length of 1" PVC pipe (lengthwise along the center line) to the outside of the pen after the plastic netting is installed. The added supporting pipe can be fastened to the framing arches with wire or nylon strapping.**
- 6. After the arched framework is constructed, Attach 5-feet high sections of 1"-mesh poultry wire around the perimeter of the pen. Securely attach the ends of the mesh to the house with appropriate fasteners that are then covered with wooden strips. Attach the wire to the arched framing members using appropriate fasteners but do not drill holes into the PVC pipes.**
- 7. Three-feet wide 1" mink wire is then folded in half to form a 90-degree angle, lengthwise.**

Enough of this wire is required to completely surround the pen and house enclosures. Position the mink wire on the outside surface of the 1"-mesh poultry wire with one angled side being vertical and the other side extending horizontally outward from the pen. Bury the horizontal side approximately 4- to 6-inches below the outside soil surface. Continue placement of this wire around the base of the house and pen. This provides protection from predators that try to tunnel under the pen's netting. Attach this wire over the poultry mesh and to the house with appropriate fasteners.

8. Install the 1" plastic game bird netting over the top of the arches to complete enclosure of the pen. Attach the netting to the arched supports, house and top edge of the poultry mesh. If desired, install the central 1" PVC pipe along the pen's center line. The plastic netting is sandwiched between the arched frame and this pipe support. Cover the end section of the pen using the same procedure as used to cover the sides and top of the pen.
9. Free-standing door/frame units can be installed in the sides or end of the pen to provide easy access. These door units must support themselves because the wire, netting and pipe construction are not sturdy enough to support the doors.
10. If hot summer conditions are prevalent and no shade exists within the pen, plant nursery shade mesh can replace plastic game bird netting at various points to provide areas of protection against the hot sunshine. In most situations this is not necessary since birds are not normally flight conditioned during hot weather.
11. Equipment installation requires that utilities be available in the pen and house. All waterers and feeders should be protected from environmental conditions, especially rain. In extreme climates, a brooder or heater may be required in the house to protect the birds and waterers from sub-freezing temperatures. A single, incandescent light fixture with a 60-watt bulb provides adequate lighting for the birds at night.

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This house plan was originally designed by Dr. Robert L. Haynes, Retired Professor of Poultry Science and Leader of Extension Poultry Science at Mississippi State University. Information was contributed by Deerbrook Farms, Brooksville, MS. Additional assistance can be obtained by sending your questions to Mississippi State University; Poultry Science Department; Box 9665; Mississippi State, MS 39762 or by e-mail at [poultry@dept.msstate.edu](mailto:poultry@dept.msstate.edu).

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