HOW TO ENHANCE PERFORMANCE OF PEN-RAISED QUAIL

FRED D. THORNBERRY, Department of Poultry Science, Texas A&M University, 107 Kleberg, College Station, TX 77043-2472. Phone 409-845-4318

Abstract: Pen-reared flight quail have become an essential part of the quail hunting industry. More than 1,000,000 quail were produced for Texas shooting preserves during the 1998-99 season. Criticism is sometimes leveled at the performance of pen reared quail. Performance problems are too often a result of shooting preserve mismanagement including lack of feed or water, contaminated holding pens, crowding, rough handling, environmental stress, feeding a holding ration of milo, etc. Some preserve managers have given both pen reared quail and the shooting industry a bad name by purchasing and using cheap bargain quail (molted breeders, unhealthy, immature and stunted quail, etc.) which can not possibly flush or fly satisfactorily. Quail brooded and reared the first four weeks in an isolation environment void of exposure to the human form or dogs and managed properly can be expected to flush and fly similar to native quail. Early exposure to a human caretaker imprints chicks creating an unbreakable bond. Such birds seldom flush and fly in a satisfactory manner. Some producers wrongly advertise their quail as isolation reared even though their brooding program virtually guarantees the birds are imprinted to humans. Experience suggests basic wildness characteristics can be easily enhanced if Texas Parks & Wildlife officials would permit limited trapping of native males for breeding purposes.

Native bob white quail populations are declining, even disappearing in the southern states and over much of Texas. Existing populations often cannot support hunting pressures desired by an ever increasing number of commercial type hunting preserves. Pen reared flight quail production is expanding in response to shooting industry demand. During the 1998-99 season, well over one million flight quail were produced and sold in Texas by Texas Gamebird Association members alone. Even with yearly expansion of production, bird supply has yet to meet late season demand.

A few shooting preserve operators in the past have given both pen reared birds and the shooting industry a bad name by purchasing and using poorly reared quail and cheap bargain quail (molted breeders, unhealthy, immature and stunted quail, etc.).

Today, the shooting preserve operator expects to receive delivery of reasonably priced birds that 1) Flush and Fly Well, 2) are Well Feathered, 3) are Healthy, and 4) are of Acceptable Body Size and Condition. Quail supplied by virtually all experienced ethical producers consistently satisfy items 2, 3, and 4. However, mismanagement by preserve personal during holding can ruin the best of quail in a remarkably short period of time. Quail require adequate, high quality gamebird feed at all times. Negligence in properly feeding and watering delivered quail can cause high mortality, morbidity and poor performance within 20 - 30 hours after delivery. Healthy vigorous quail held in preserve holding pens contaminated by birds from other sources can break with ulcerative enteritis or other diseases unless medication is available in feed or water. Medications for common diseases such as coccidiosis and enteritis should be available when treatment is required.

Unprotected exposure to environmental extremes (temperatures or heavy rain) or rough handling can be disastrous. Unrested quail hunted too soon after delivery may perform poorly. Quail held on milo or cracked corn for a week or more can become deficient in essential micro-nutrients and overly fat, reducing flight performance and inviting health problems.

Item 4 (Flush and Fly Well at delivery) can vary considerably between flight bird producers and is dependent on managerial effort on the part of the producer. Quail from some farms consistently perform similar to native birds. These quail are brooded in an isolated environment where chicks seldom or never see a human (or dog) during the first four or more weeks of life. Brooder pen observations are made via a one-way glass or peephole, and brooding activities are carried out in darkness with a flashlight.

Quail chicks imprint on moving objects during the first few days or week of life. Once imprinting with a human occurs an unbreakable bond is established with
the human form and the birds will have no real fear of humans. Flight performance of imprinted birds is almost always inferior to that of birds brooded in isolation.

Chicks brooded in isolation from humans can easily be detected by two weeks of age. Open the brood pen door slightly with a dim light on and insert a hand or head. Isolation brooded chicks will invariably panic. Imprinted chicks in contrast will show little or no excitement.

When quail are moved to brood-grow and flight pens, a barrier curtain around the outside perimeter of the row of flight pens is desirable to keep exposure to a minimum. This is desirable with isolation reared quail even though isolation studies at Texas A&M University and commercial practices on farms have shown daily exposure of birds seven weeks and older to a human has minimal effect on the wildness of isolation brooded quail.

Pen reared quail are successfully used to establish huntable coveys. This practice however can be expensive in terms of predation loses and equipment, labor and other costs.

Pen reared quail, when brooded in isolation and managed and handled properly on the gamebird farms and hunting preserves, can satisfactorily supplement native quail hunting or be the only source of huntable quail on a preserve.

Observations have shown conclusively that offspring of pen reared X wild native quail exhibit a marked difference in wildness and often body size and feather color when compared to offspring of pen reared X pen reared controls. This suggests basic desirable characteristics of native quail could significantly enhance the quality of pen reared flight quail if Texas Parks & Wildlife officials would permit limited trapping of native males for breeding purposes.