



1982

A Radio Transmitter for Quail

Lorvel J. Shields

Tall Timbers Research Station

B. S. Mueller

Tall Timbers Research Station

Follow this and additional works at: <http://trace.tennessee.edu/nqsp>

Recommended Citation

Shields, Lorvel J. and Mueller, B. S. (1982) "A Radio Transmitter for Quail," *National Quail Symposium Proceedings*: Vol. 2 , Article 17.
Available at: <http://trace.tennessee.edu/nqsp/vol2/iss1/17>

This Technical Session is brought to you for free and open access by Trace: Tennessee Research and Creative Exchange. It has been accepted for inclusion in National Quail Symposium Proceedings by an authorized editor of Trace: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

A RADIO TRANSMITTER FOR QUAIL¹

LORVEL J. SHIELDS, Tall Timbers Research Station, Tallahassee, FL 32312

B. S. MUELLER, Tall Timbers Research Station, Tallahassee, FL 32312

Abstract: This paper describes a small radio-transmitter that has been developed specifically for use on quail. The transmitter weighs 5g, is disk-shaped (25mm diameter X 7mm thick) and is worn on the chest. It is kept in place by a harness made from nylon covered, stainless-steel wire that also functions as the antenna. Because of the transmitter's light weight, shape, and position, quail seem to tolerate it very well. Also, it cannot be seen by aerial predators. The nominal signal consists of 30 msec pulses with a frequency of 1 Hz. Movement produces one extra 40 msec pulse per cycle, 500 msec after the 30 msec pulse. These characteristics allow for relatively simple automatic detection and recording of activity. The transmission range, using a commercially available 3-element Yagi and receiver, exceeds one-half mile. Life expectancy is about 60 days. Components for the transmitter cost about \$25.00 (1981).

¹Abstract only.