BUSINESS RESEARCH GROUP

BELLEVUE, IOWA 52031

TEST REPORT - DEER ALARM WHISTLE

TEST RECORDINGS: Whistle models were mounted on vehicle. Audio tape equipment was located in vehicle with microphones attached outside vehicle to record whistle sound, vehicle sound, and road noise. Audio tape used was Sony HF Bias 120 USEQ. Audio equipment used was manufactured by Panasonic.

Recordings were made of each whistle model under various conditions. Conditions recorded were: various vehicle speeds, road surface variance, with traffic, and without traffic. Traffic conditions were recorded to hear the effect oncoming traffic had on whistling effect of individual models.

MODELS TESTED: Nine whistle models were recorded and tested consecutively. Results were as follows:

Model no. 1 (valve type) - not sufficiently effective

Model no. 2 (valve type) - not sufficiently effective

Model no. 3 (valve type) - not sufficiently effective

Model no. 4 (valve type) - not sufficiently effective

Model no. 5 (flow-thru type) - approximately 40% effective

Model no. 6 (flow-thru type) - approximately 50% effective

Model no. 7 (flow-thru type) - approximately 70% effective

Model no. 8 (flow-thru type) - approximately 98% effective (too loud)

Model no. 9 (flow-thru type) - approximately 92% effective (good sound level)

ALL FOLLOWING INFORMATION PERTAINS TO MODEL 9 WHISTLE

TESTING LOCATIONS: Jackson County, Iowa - white tail deer

Dubuque County, Iowa - white tail deer

Grant County, Wisconsin - white tail deer

Dillon Lake area, Colorado - mule deer

TESTING TIME: 92% night conditions, 8% daylight conditions

TESTING PERIOD: July 1986 thru May 1987

TESTING METHOD: Test recording of model 9 whistle was used. Lighting was used to simulate auto lights on all night tests. Tests were done in highly populated deer areas on wild deer - no tame or penned deer were used in the tests. Recording was used to "freeze" or stop moving deer. Where posible an ATV was used to move lighting and recording into moving deer.

The purpose of the tests were to freeze or stop moving deer. The number of deer and the result of recording was noted on charts. When possible the sex (buck or doe) of the deer was noted.

TEST RESULTS: Testing was done on 380 deer of both sexes. Results were as follows:

351 deer responded in manor desired

29 deer did not respond as desired

No difference was noted on effect of recording on buck or doe deer. Both responded the same with the possible exception that buck deer, during the short time they were in rut, were less predictable. There was less of a reaction in these deer. Reaction to the recording was the same for both species of deer tested. No difference was noted between white tail and mule deer.

A whistle heard by deer too far ahead of the vehicle was not desirable. Ideal range of whistle is about 110 yards. Ideal freeze time is approximately 4 seconds at 55 mph. Lower or higher speeds corresponds with the various volumes of the whistle.

Conventional type whistles (valve type) seemed to have limited effect on deer tested. It also appears that very high sound frequency (over 18,000 hertz) only has effect under limited conditions.