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SIE I.D.
GUN-8316

NOTICE OF RESEARCH PROJECT

SUPPORTING AGENCY:
INTERIOR DEPARTMENT
BUREAU OF SPORT FISH. & WLF.
FEDERAL AID. DIVISION

AGENCY'S NUMBER(S):
9-1

TITLE OF PROJECT:
CURRENT FISH AND WILDLIFE PESTICIDE PROBLEMS

PRINCIPAL INVESTIGATOR, ASSOCIATES AND DEPARTMENT,SPECIALTY:
W GRIFFITH

RECIPIENT INSTITUTION:
STATE DEPT. OF FISH & GAME
987 JED SMITH DR.
SACRAMENTO, CALIFORNIA 95819

PERIOD FOR THIS NRP:
7/70 TO 6/71
FY71 FUNDS $14,342

SUMMARY OF PROJECT:

Study Objectives: 1. Promote the development of pesticide use practices and pesticide regulation to adequately safeguard fish and wildlife and their environment. 2. Field test for toxicity and hazard the hazard the pesticides that appear to have the greatest potential for fish and wildlife damage.

Job Objectives: To evaluate those fish and wildlife pesticide problems and relationships that are currently of greatest concern to the Department. Concern is based on potential hazard to wild animals of certain experimental pesticides and pesticides used in operational pest control programs. The investigations are aimed primarily at: 1. developing information regarding the hazard of these chemicals under field conditions, and 2. developing a guide for establishing adequate safeguards for fish and wildlife. Special attention will be given to the hazards to game and nongame species created by the organic phophates in cotton culture, and polychlorinated biphentls (PCB) in eggs of raptors and water associated birds.

Procedures: (a) Evaluate the hazard of mercurial seed dressings to birds. A survey will be made to determine the amounts of the different mercurials being used in California. An assessment will be made of the comparative hazard of alkyl mercury seed dressing and other types of mercury seed dressings. Caged pheasants will be fed grain treated with alkyl mercury and another type of mercury fungicide to determine the effect on the test animals and the amount and type of mercury accumulated in tissues. Pheasants will be collected in areas where alkyl mercury and other mercury seed dressings have been used extensively over a period of years. The birds will be examined for gross pathology and tissues analyzed for mercury content. (b) Evaluate the effects on nontarget wildlife of Diphacin, and Endrin treated conifer and brush seeds in both field and forest rodent control programs.

The experimental application of the anticoagulant Diphacin for ground squirrel control may also be carried out in one or more of these by agricultural agencies. Evaluation of side effects of these experimental applications and other suitable tests will be made.

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