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Changeover Delay and Travel Time: A Comparison and Look at the Use of Cod as a Valid Analog for Travel Time in Behavioral Ecology

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Poster Presentation 14

**CHANGEOVER DELAY AND TRAVEL TIME: A COMPARISON AND
LOOK AT THE USE OF COD AS A VALID ANALOG FOR TRAVEL
TIME IN BEHAVIORAL ECOLOGY**

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The field of behavioral ecology operates on the assumption that the principles of Darwinian fitness can be applied to behavior as well as to biology. This implies that only the most optimal foraging strategies (which are biologically "wired") will ensure an animal's survival and subsequent reproduction and that poorer strategies will be selected for and lost from the gene pool. Therefore, animals ought to behave in the most advantageous manner in terms of energy loss and gain. In this experiment, we assumed that matching is an optimal foraging strategy. We looked at the cost-benefit analysis of changing patches (which are areas of abundant food that we assume to be analagous to VI schedules imposed in a Skinner box) of varying abundance in terms of travel time and opportunity cost. In addition, we compared the changeover delay to the imposition of physical barriers between variable interval schedules and their respective effects on behavior relative to the matching law.