

Economics of Individual Behavior Change/Choice

Applications to Chesapeake Bay
Management
Doug Lipton

Major Reasons to Study Economics of Individual Behavior

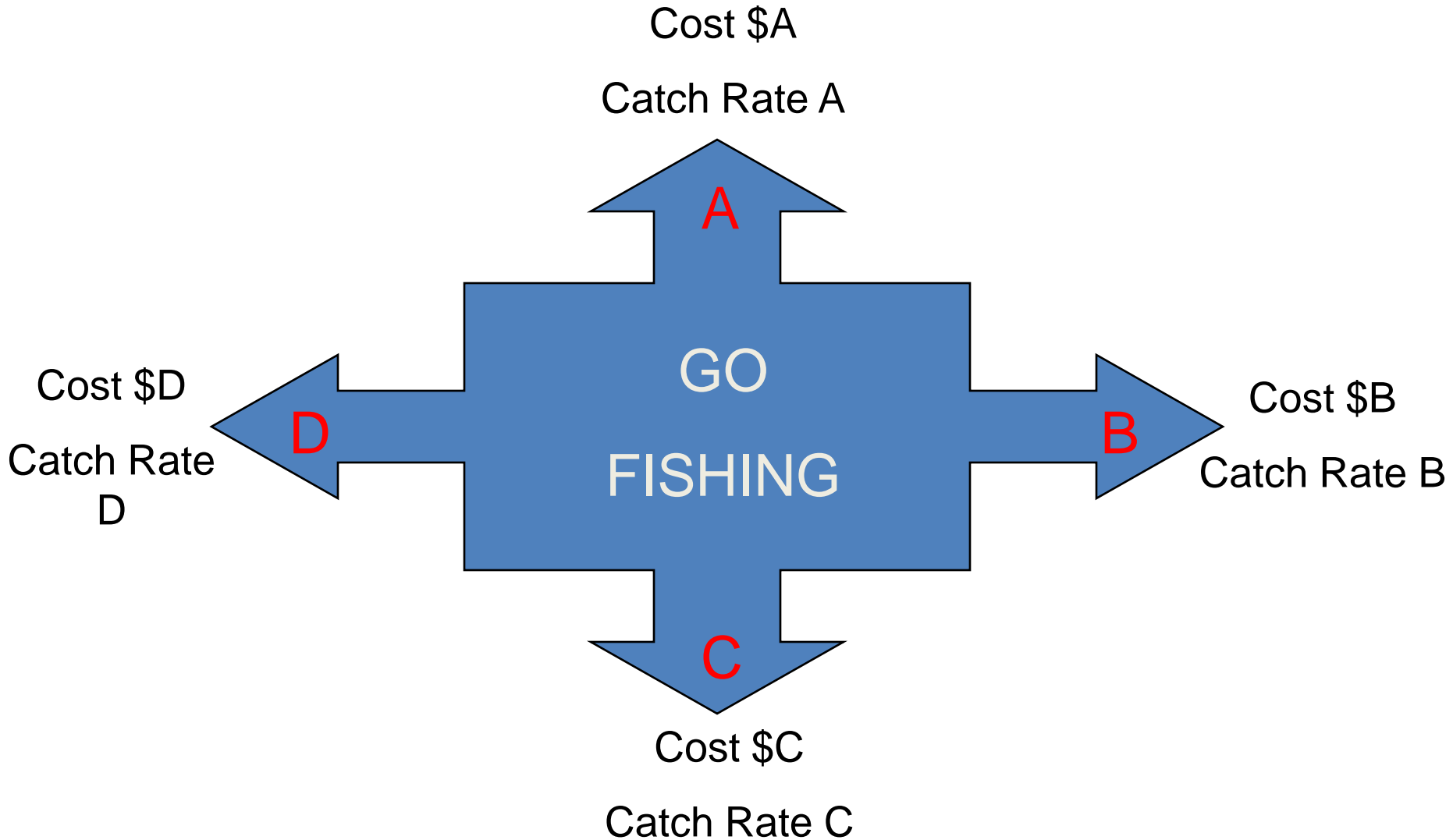
- Valuation
 - Non-market values (e.g., recreation)
 - Value of attributes
- Predict Response
 - To economic or other events
 - To policy or management actions

Approaches Depends on What's Being Studied and Available Data

- Revealed Preference
 - Observe choice behavior
 - Purchases
 - Actions
- Stated Preference
 - Survey Approach

**VALUATION CAN BE INFERRED
FROM OBSERVED CHOICES**

Random Utility Illustration



STATED PREFERENCE

SECTION B: SALTWATER FISHING TRIPS

Please compare Trip A, Trip B, and Trip C in the table below, then answer questions **1** and **2**. Compare only the trips on this page. Do not compare these trips to trips on other pages in this survey. Assume that the trips below are identical in every way except for the features listed in the table. All regulations remain as they are today unless otherwise noted in the table below.

TRIP FEATURES		TRIP A	TRIP B	TRIP C
REGULATIONS	DAILY BAG (TAKE) LIMIT Number of fish you can <u>legally</u> keep per day.	2 Cod	10 Pollock	Do something other than saltwater fishing.
	MINIMUM SIZE LIMIT Smallest fish you can <u>legally</u> keep of this species.	26 inch Cod	23 inch Pollock	
CATCH	NUMBER OF LEGAL-SIZE FISH YOU CATCH These fish are <u>at least legal minimum size</u> . Some fish are released if you catch more than the daily bag limit.	10 Cod	3 Pollock	
	NUMBER OF UNDERSIZED FISH YOU CATCH These fish are <u>below the legal minimum size</u> . <u>All</u> of these fish <u>must</u> be released.	3 Cod	3 Pollock	
	NUMBER OF OTHER FISH YOU KEEP Other fish you catch on this trip that <u>can</u> be <u>legally kept</u> .	10 Haddock 6 Pollock	3 Cod 1 Haddock	
TRIP DETAILS	TRIP LENGTH Total time purchased for this trip.	10 Hours	4 Hours	
	TOTAL TRIP COST <u>YOUR</u> share of the fishing trip cost, including bait, ice, fishing equipment, daily license fees, boat rental fees, boat fuel, and round trip transportation costs associated with traveling to and from the fishing location. Travel costs may include vehicle fuel, car rental, tolls, airfare, and parking. This cost does <u>not</u> include the price of food or drink.	\$230	\$156	

1 I like this trip best:
(Please mark the **ONE** option **YOU** like best with a or)

TRIP A <input type="checkbox"/>	TRIP B <input type="checkbox"/>	TRIP C <input type="checkbox"/>
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2 Please rate the trips listed in the table above. (Circle the number that reflects your opinion best.)

TRIP A	<i>DISLIKE</i>	1	2	3	4	5	6	7	8	9	10	<i>LIKE</i>
TRIP B	<i>DISLIKE</i>	1	2	3	4	5	6	7	8	9	10	<i>LIKE</i>
TRIP C	<i>DISLIKE</i>	1	2	3	4	5	6	7	8	9	10	<i>LIKE</i>



Experimental Economics

- Mesocosm for Economists
 - Controlled stylized experiments of behavior
 - Can learn what factors influence behavior
 - Help us interpret behavior in “real world”

e.g., How do initial conditions in a market influence behavior?

Fishermen's Expo experiment - Auctions

QUESTIONS/COMMENTS?