

**A Survey on
Commercial Fishing Impacts
on Habitats and Bycatch**

INFORMATION FOR COMPLETING THE QUESTIONNAIRE

Attached is a questionnaire containing realistic levels of commercial fishing impacts on bycatch and habitat. These impacts are based on an independent assessment of existing data and scientific literature and expert consultation. The results from this assessment are presented as:

- Six groups of **bycatch**; (1) seabirds, (2) marine mammals, (3) large pelagic fish, (4) forage fish, (5) groundfish and (6) invertebrates; and
- Two types of **habitat impact**; (1) to corals and sponges and (2) to the seafloor.

Each page contains two sets of impacts, **A** and **B**. Please indicate, based on your opinion, which set of impacts you consider **ECOLOGICALLY MORE SEVERE**.

Please refer to the definitions of the terms provided BEFORE beginning the survey. Each comparison is different; there are no trick questions or duplicates. Please note that there are no right or wrong answers. We simply want your opinion about these impacts.

Please make sure to complete ALL pages or your survey will not be considered in our study. After you are finished with the questionnaire please complete the "Information About Yourself" section at the back.

We truly appreciate your participation and sincerely thank you for your kind assistance.

DEFINITIONS OF TERMS USED IN THE SURVEY

Bycatch is unintentionally caught marine species that are either landed or discarded (alive or dead).

Bycatch is classified into six groups:

- (1) **Seabirds** – for example, sea gulls, cormorants, shearwaters, murre, puffins.
- (2) **Marine mammals** – for example dolphins, porpoises, whales, seals, sea lions, sea otters and walrus.
- (3) **Sharks and Large Pelagics** – including sharks, tuna, and swordfish.
- (4) **Forage fish** – small pelagic or semi-pelagic (midwater) fish often eaten by large predatory fish, for example, herring, Pacific hake, capelin, mackerel and sand lance.
- (5) **Groundfish** – fish living on just above the ocean floor, for example cod, dogfish, flatfish, rockfish, skates and rays.
- (6) **Invertebrates** – for example, clams, scallops, sea stars, sea cucumbers, sea urchins, crabs, lobsters.

Habitat is the environment in which an organism lives, including everything that surrounds and affects its life.

Habitat impact is classified into two groups:

- (1) **Corals and sponges (and other biogenic structures)** – biological structures including hard corals, soft corals, kelp, seagrass, and bryozoans.
- (2) **Seafloor** – physical structures including boulder, rock, gravel, mud and sand.

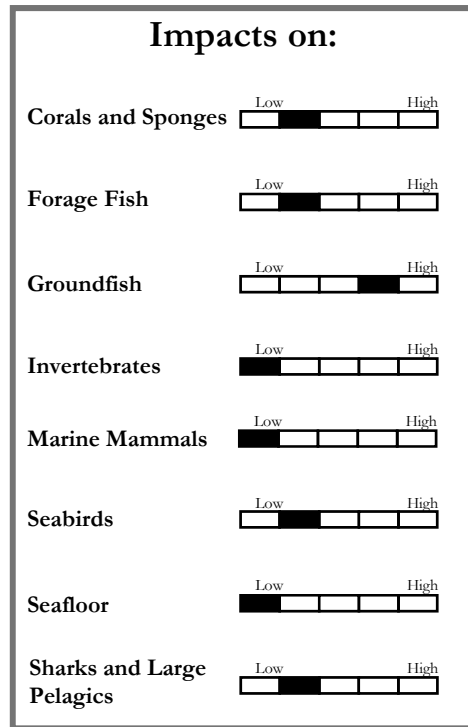
In your opinion, which of these sets of impacts, A or B, do you consider

C-P14

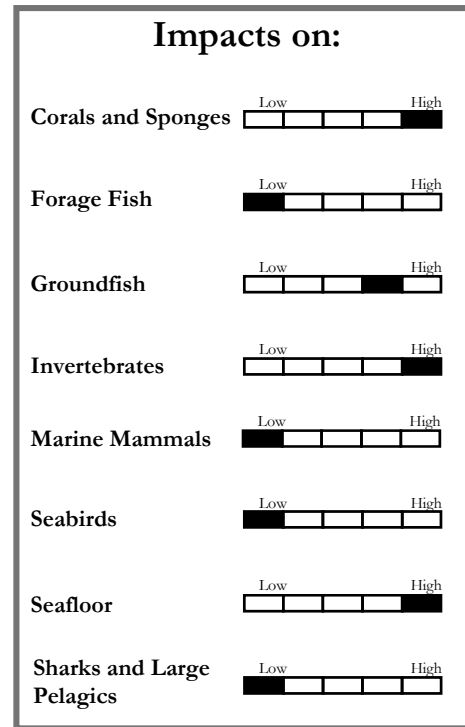
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



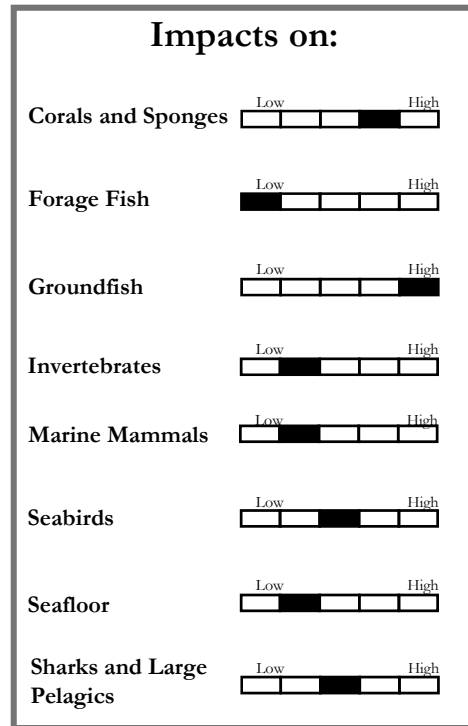
In your opinion, which of these sets of impacts, A or B, do you consider

C-P30

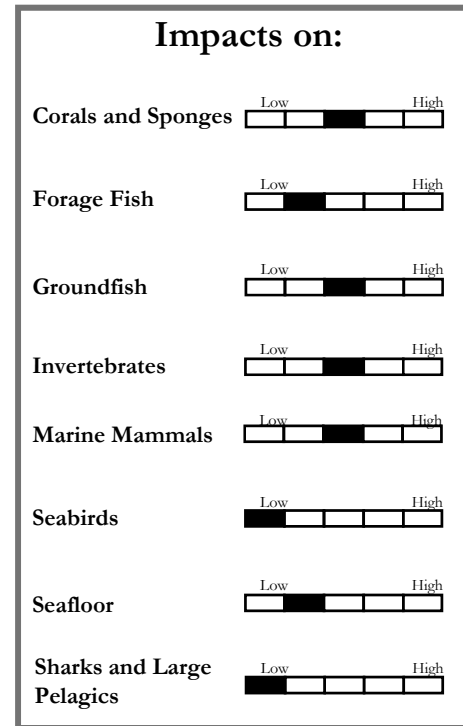
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



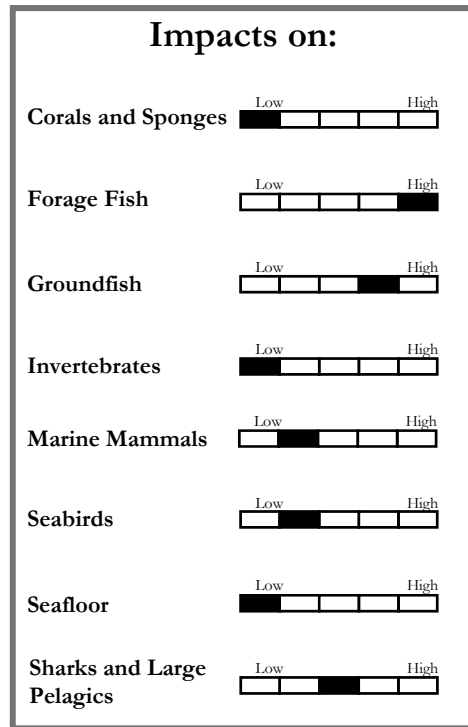
In your opinion, which of these sets of impacts, A or B, do you consider

C-P16

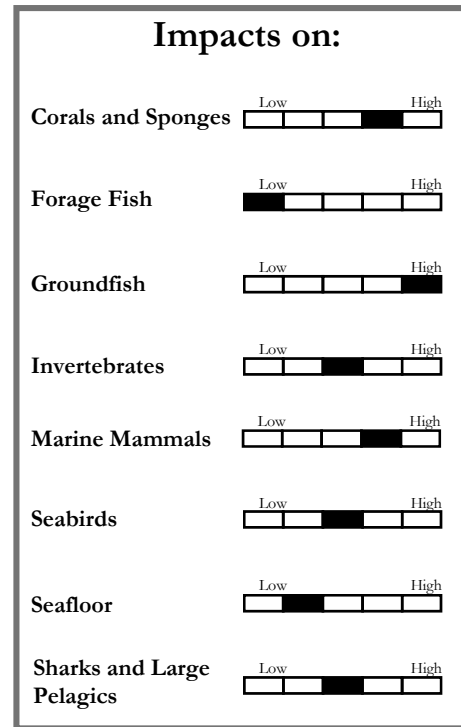
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



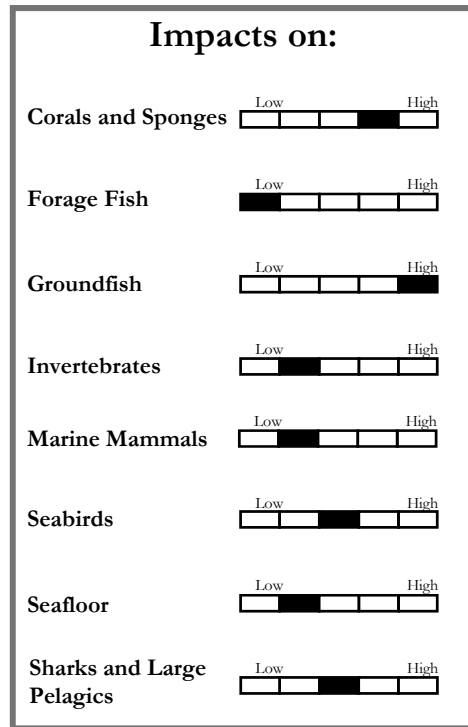
In your opinion, which of these sets of impacts, A or B, do you consider

C-P17

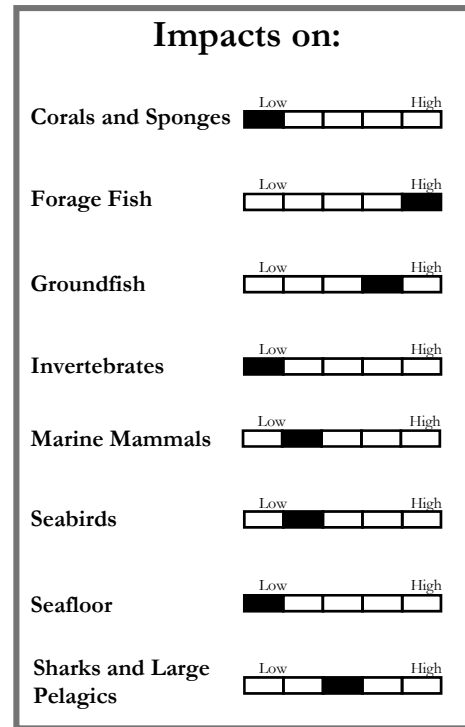
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



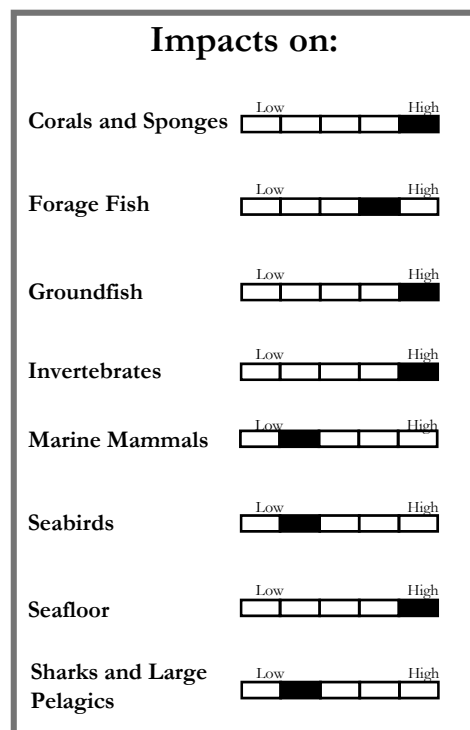
In your opinion, which of these sets of impacts, A or B, do you consider

C-P39

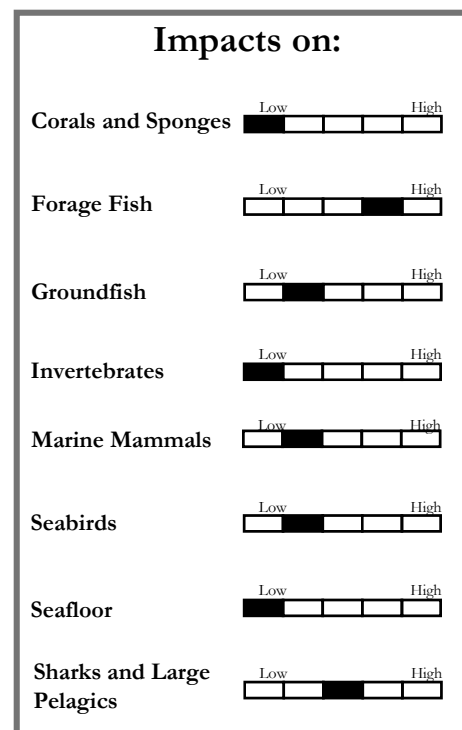
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



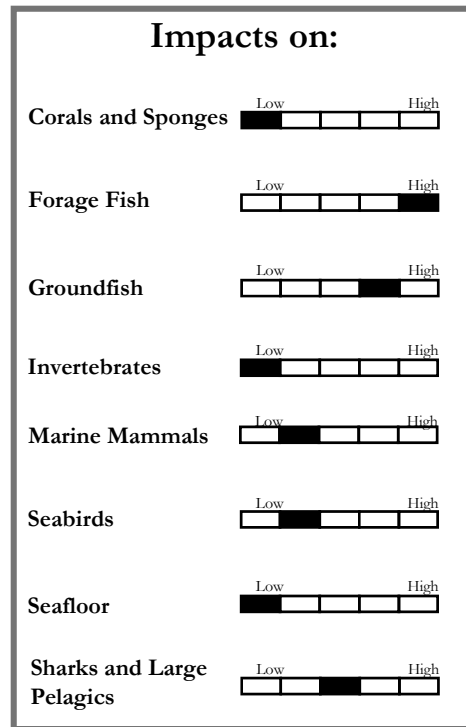
In your opinion, which of these sets of impacts, A or B, do you consider

C-P35

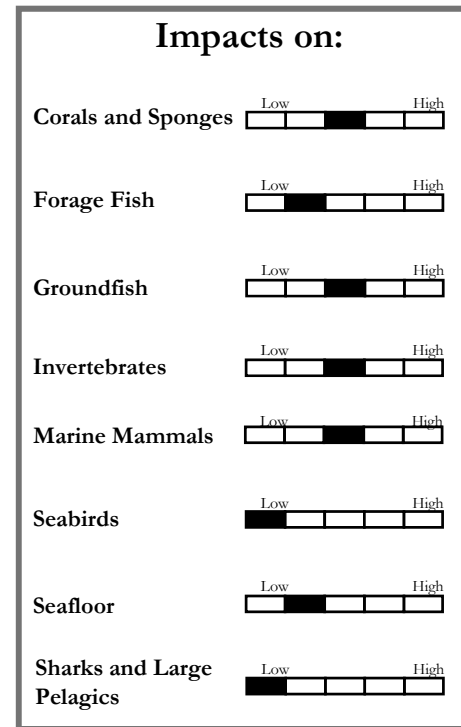
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



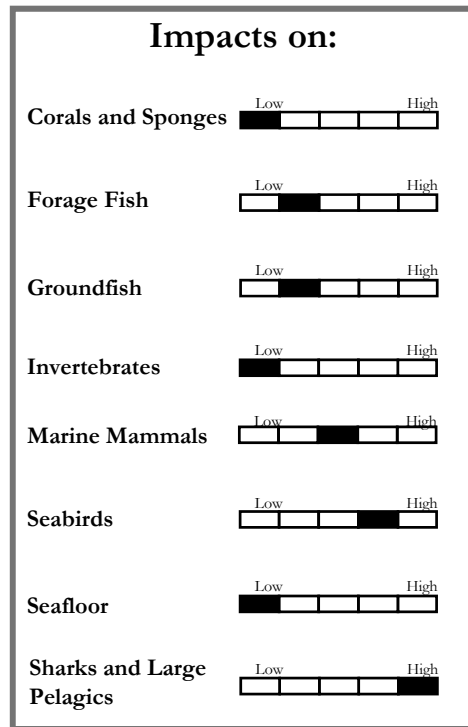
In your opinion, which of these sets of impacts, A or B, do you consider

C-P24

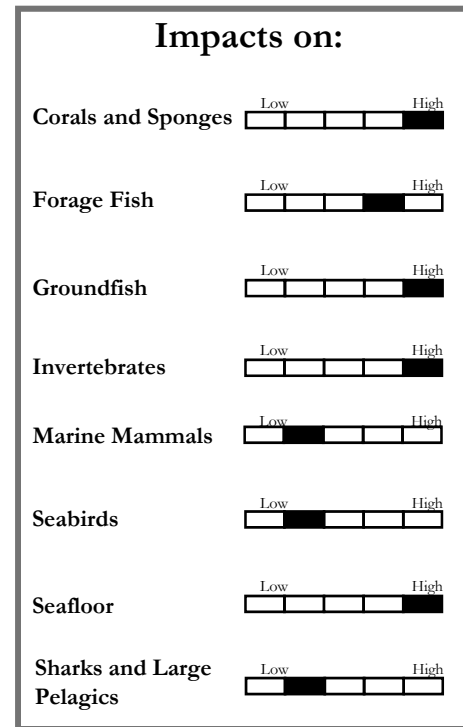
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



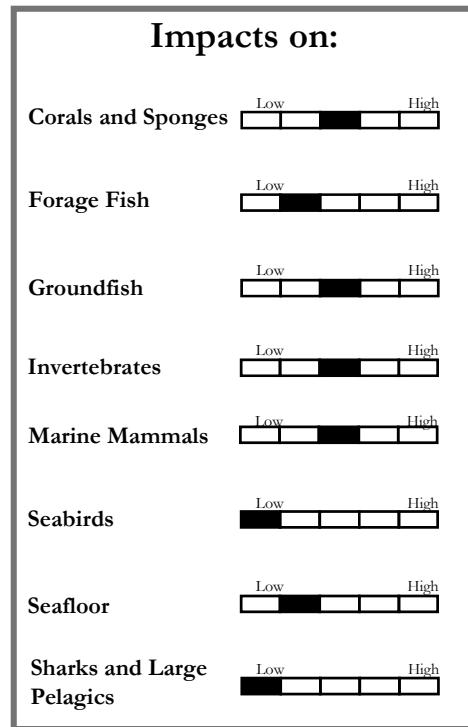
In your opinion, which of these sets of impacts, A or B, do you consider

C-P29

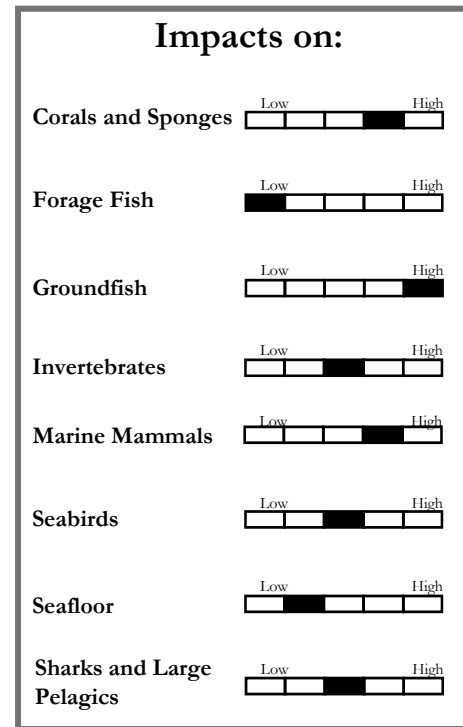
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



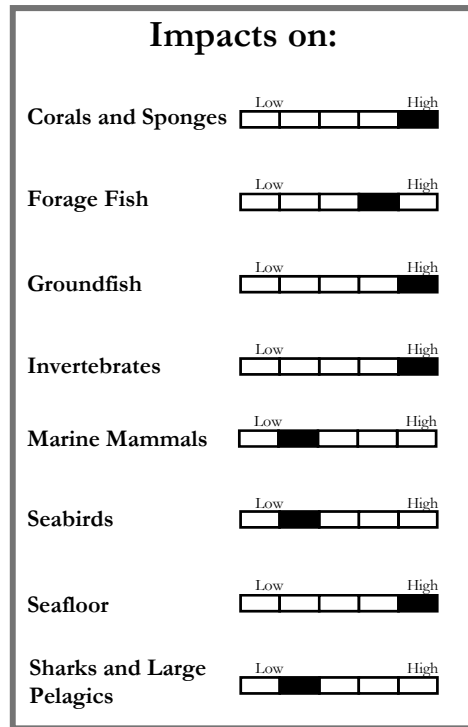
In your opinion, which of these sets of impacts, A or B, do you consider

C-P2

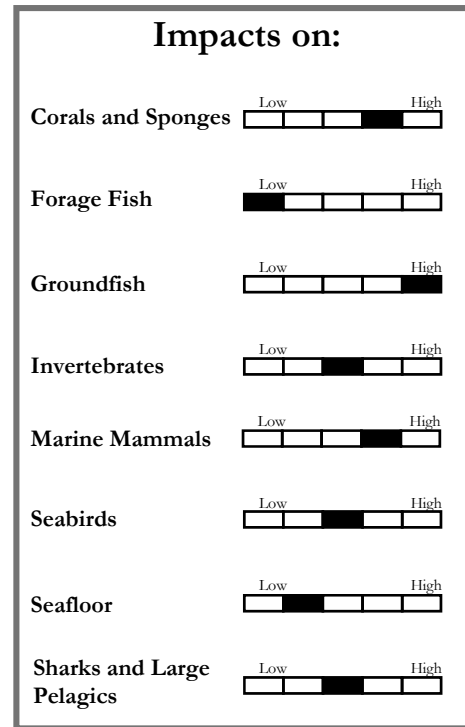
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



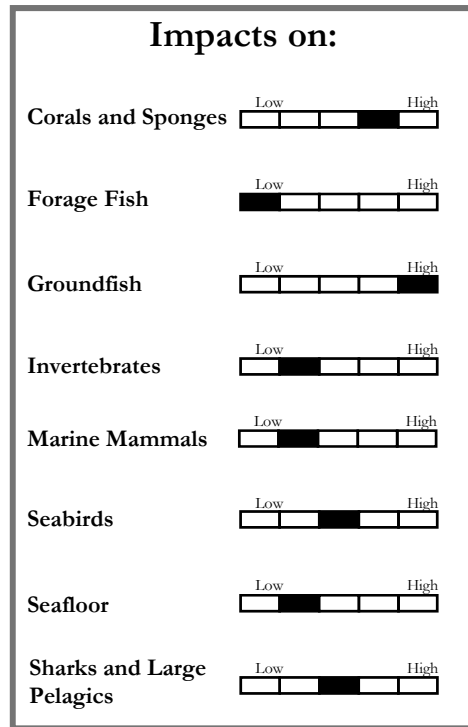
In your opinion, which of these sets of impacts, A or B, do you consider

C-P3

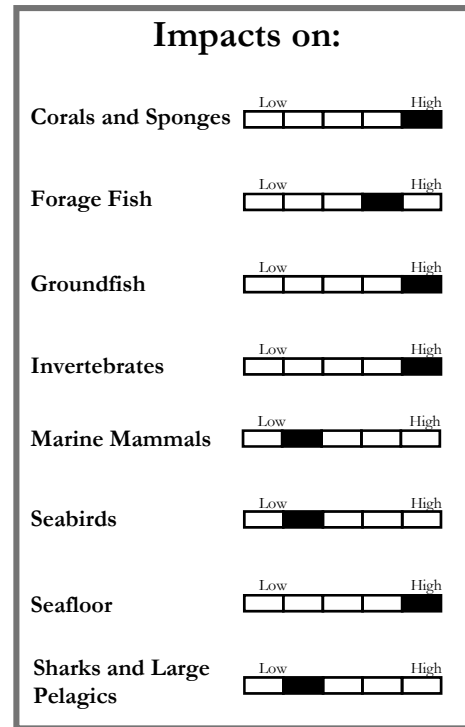
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



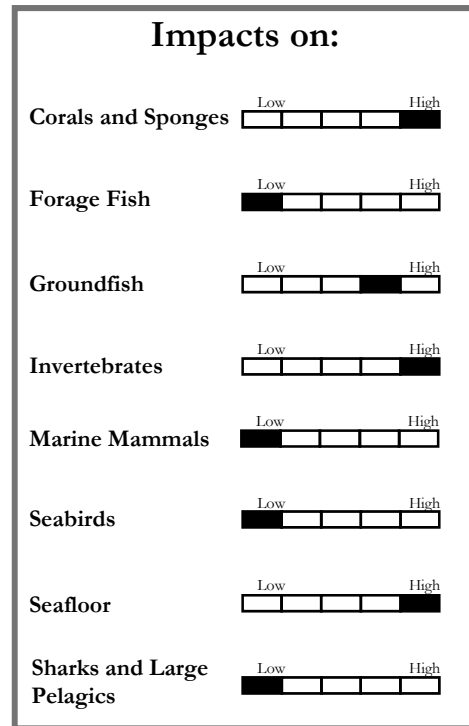
In your opinion, which of these sets of impacts, A or B, do you consider

C-P5

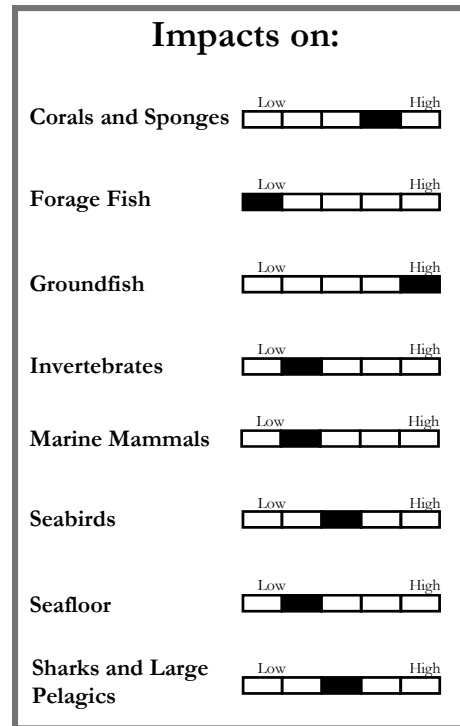
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



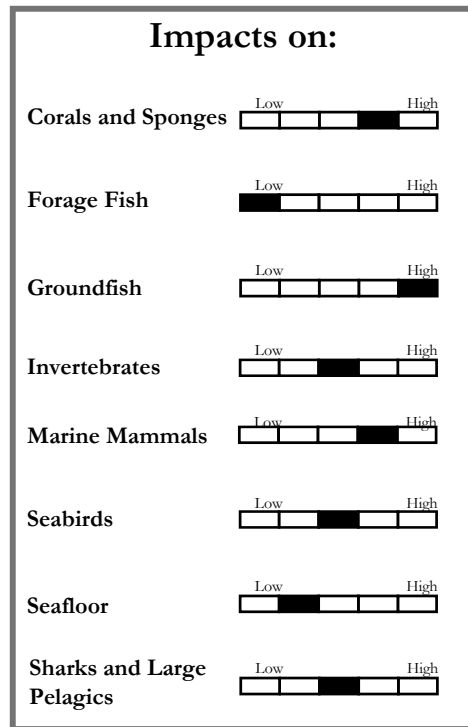
In your opinion, which of these sets of impacts, A or B, do you consider

C-P37

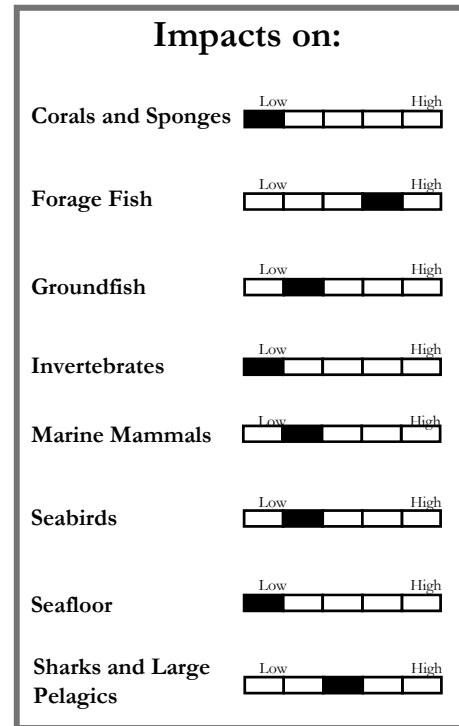
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



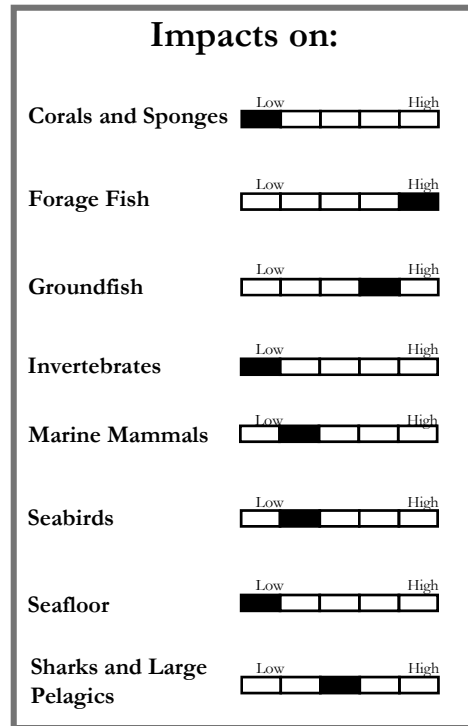
In your opinion, which of these sets of impacts, A or B, do you consider

C-P28

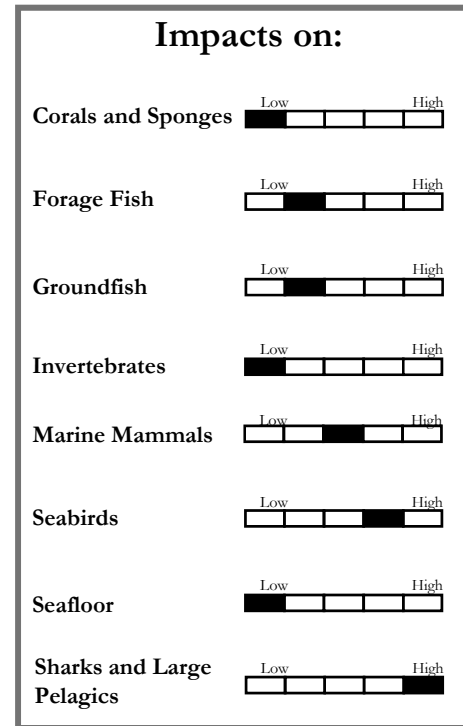
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



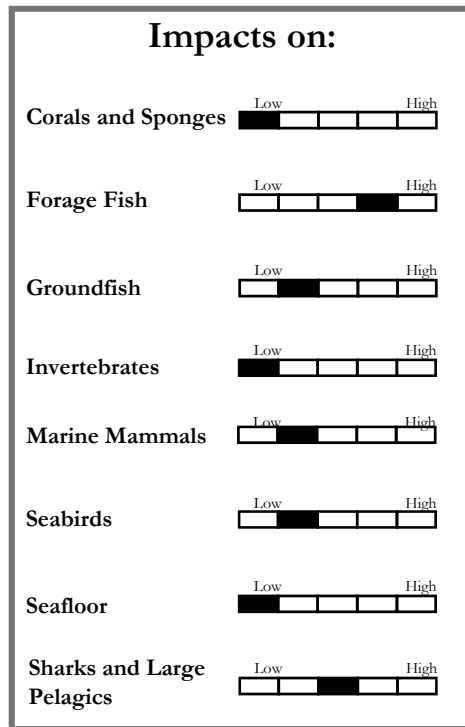
In your opinion, which of these sets of impacts, A or B, do you consider

C-P38

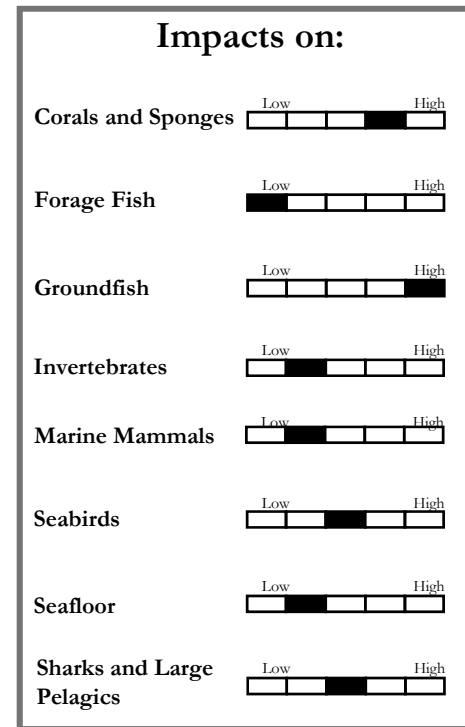
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



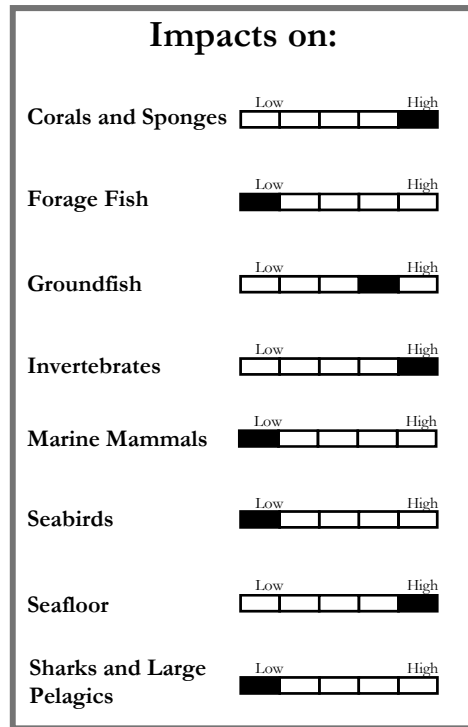
In your opinion, which of these sets of impacts, A or B, do you consider

C-P4

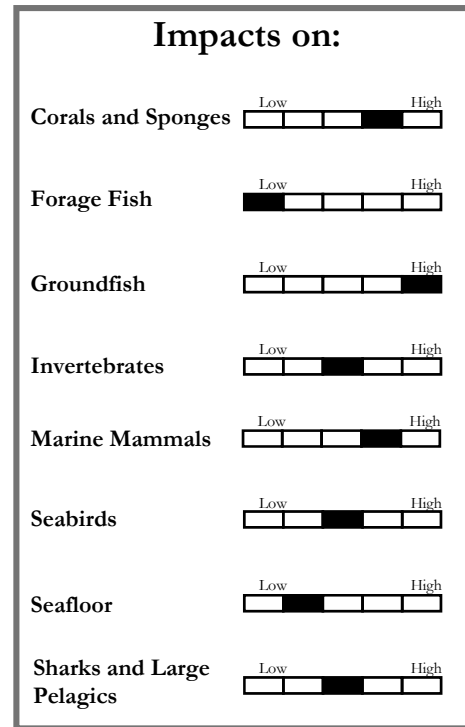
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



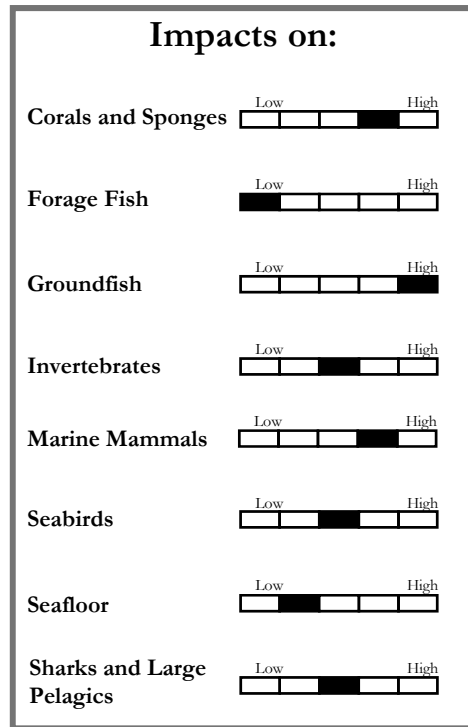
In your opinion, which of these sets of impacts, A or B, do you consider

C-P22

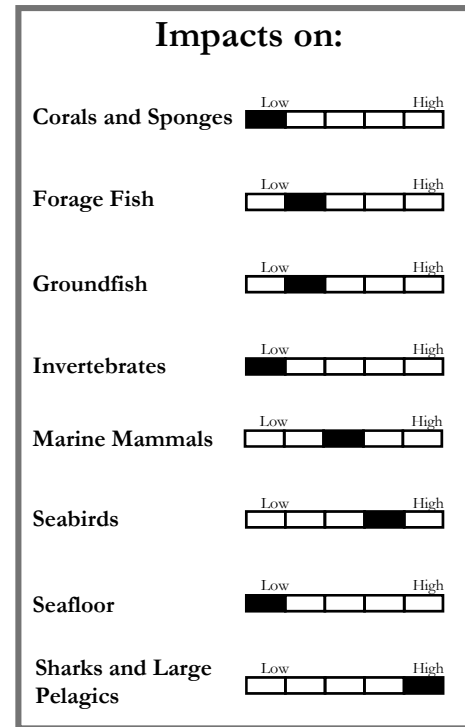
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



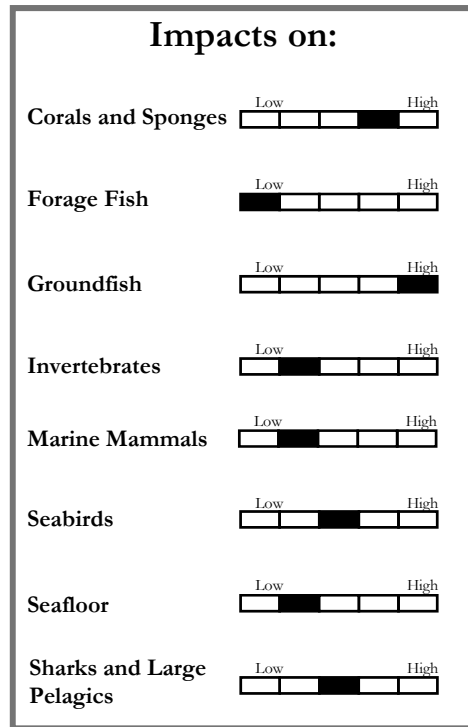
In your opinion, which of these sets of impacts, A or B, do you consider

C-P12

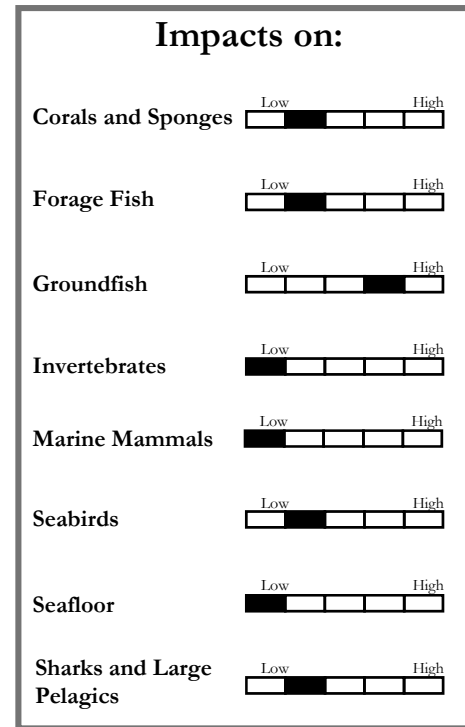
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



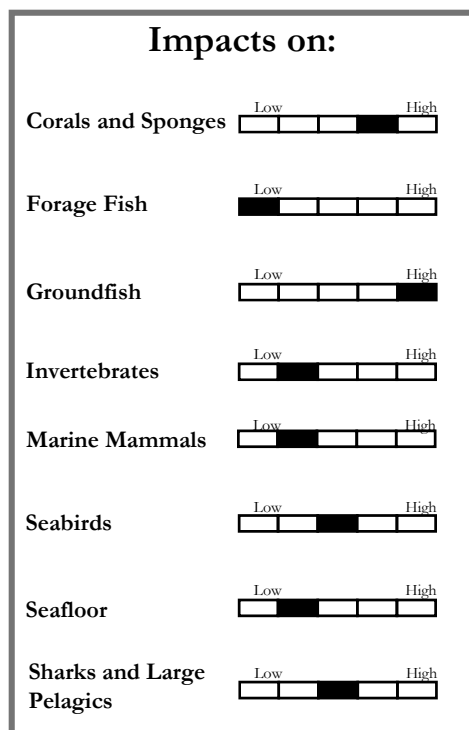
In your opinion, which of these sets of impacts, A or B, do you consider

C-P23

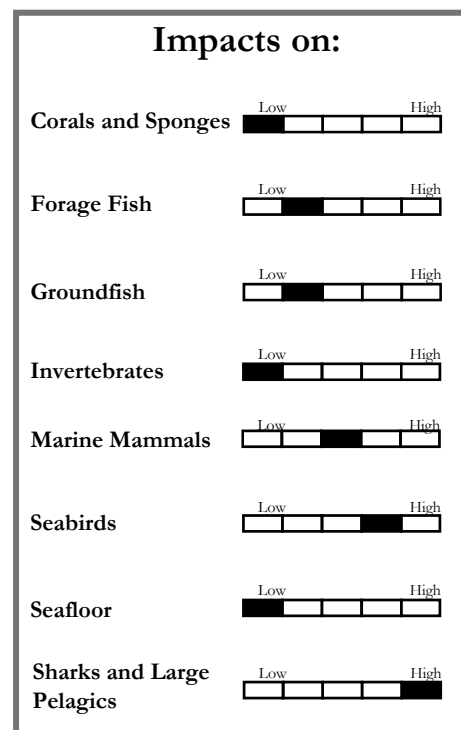
ECOLOGICALLY MORE SEVERE?

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A



B



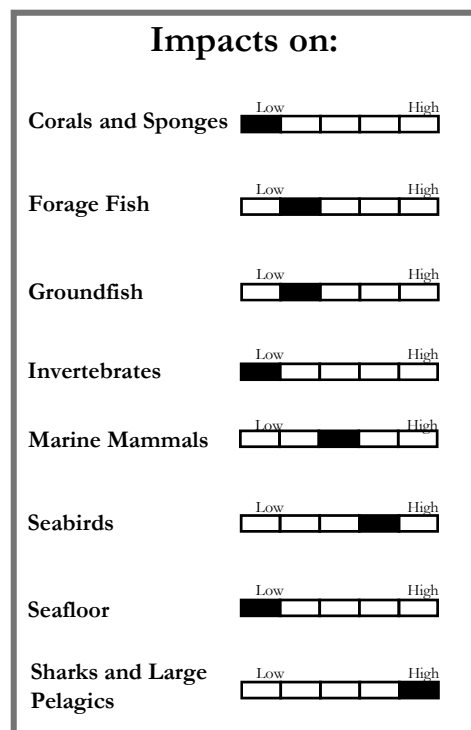
In your opinion, which of these sets of impacts, A or B, do you consider

C-P27

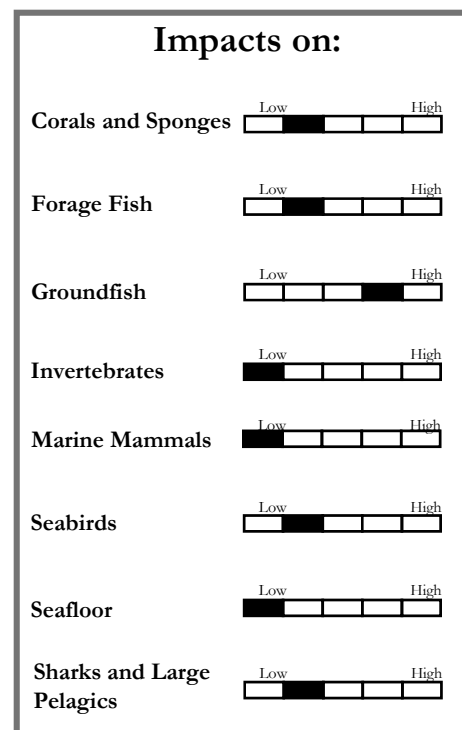
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



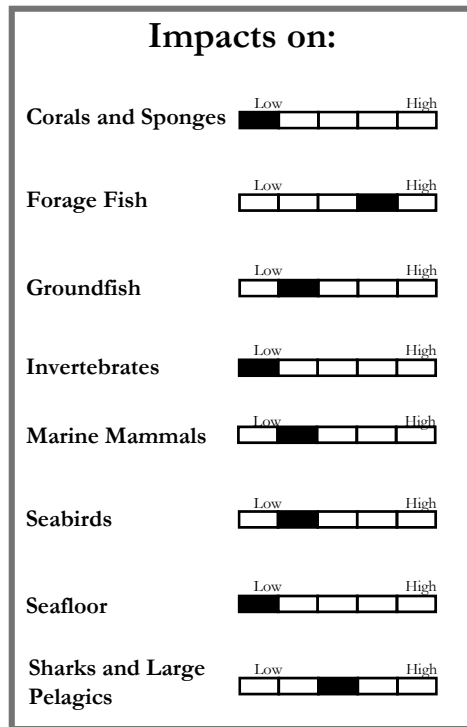
In your opinion, which of these sets of impacts, A or B, do you consider

C-P42

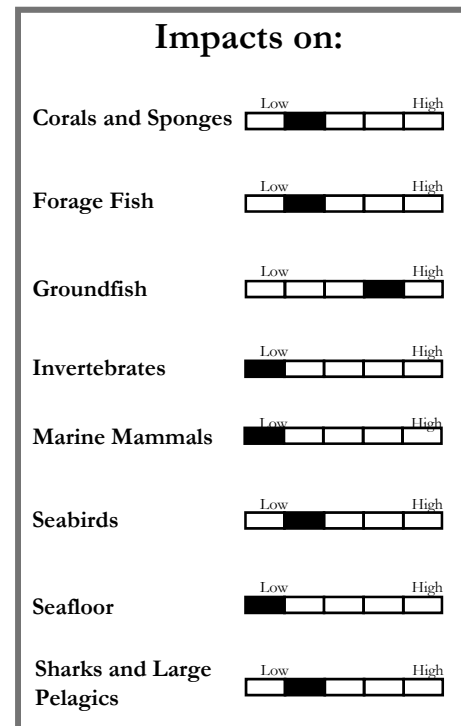
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



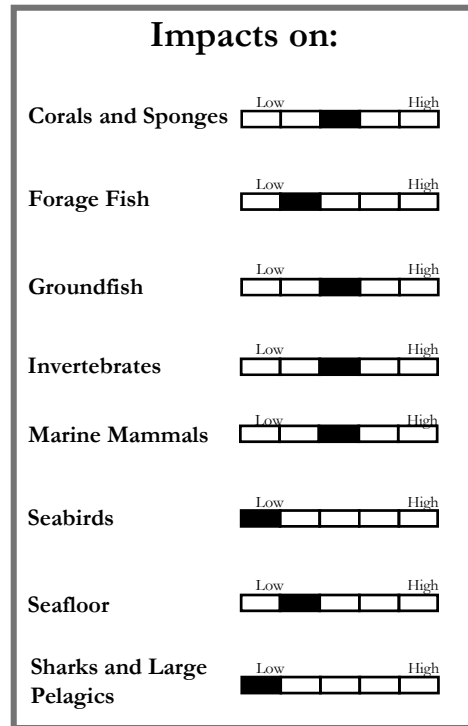
In your opinion, which of these sets of impacts, A or B, do you consider

C-P31

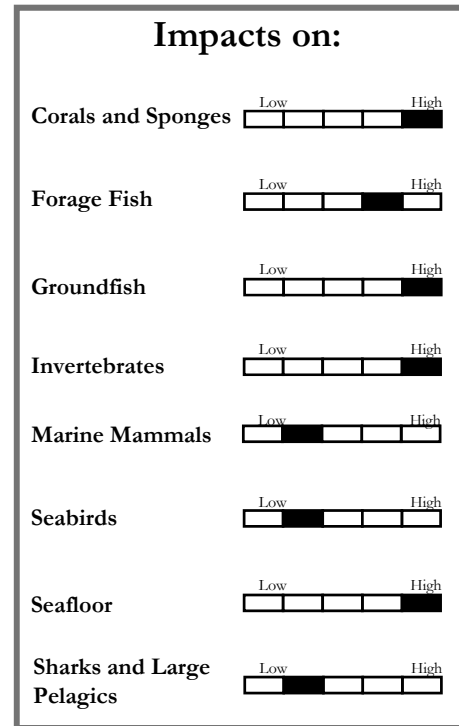
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



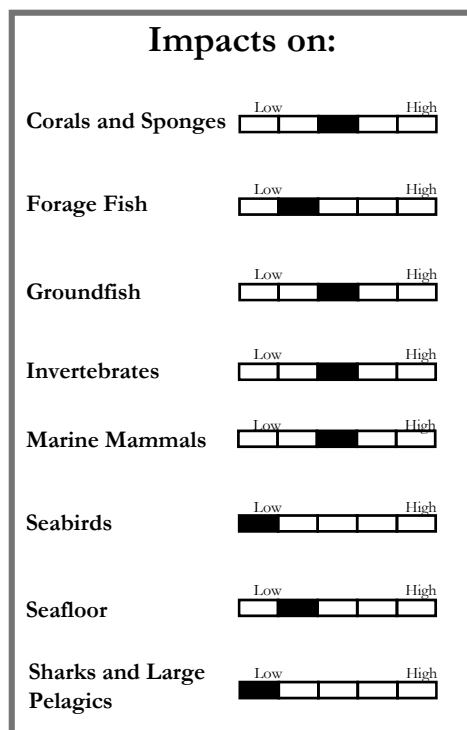
In your opinion, which of these sets of impacts, A or B, do you consider

C-P32

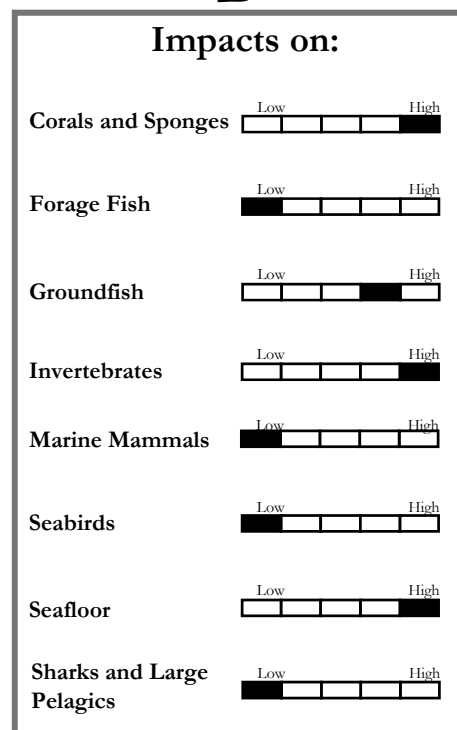
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



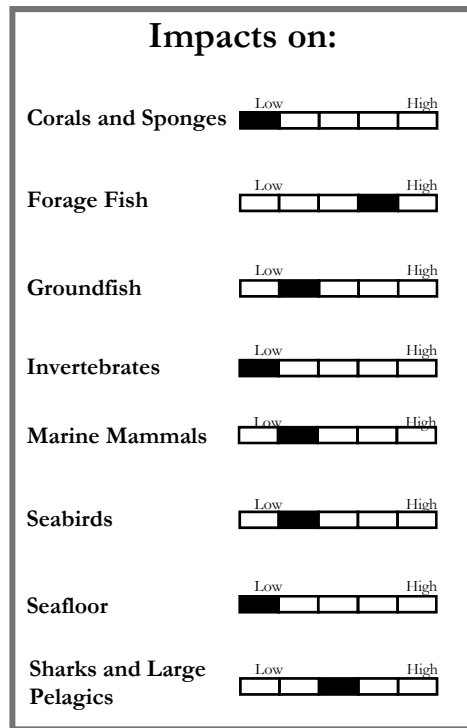
In your opinion, which of these sets of impacts, A or B, do you consider

C-P45

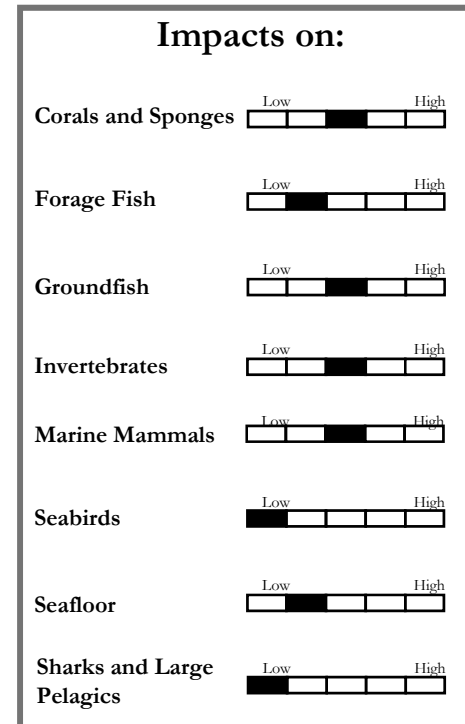
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



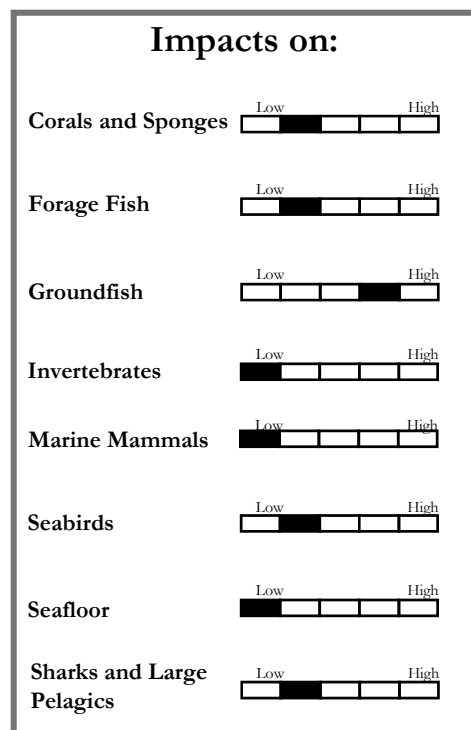
In your opinion, which of these sets of impacts, A or B, do you consider

C-P34

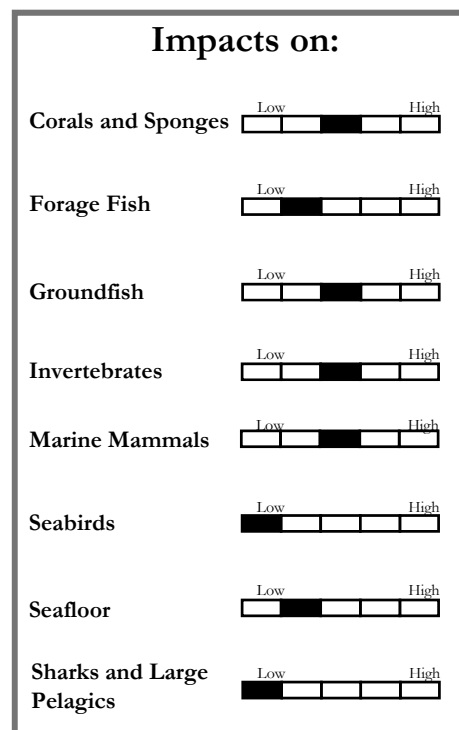
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



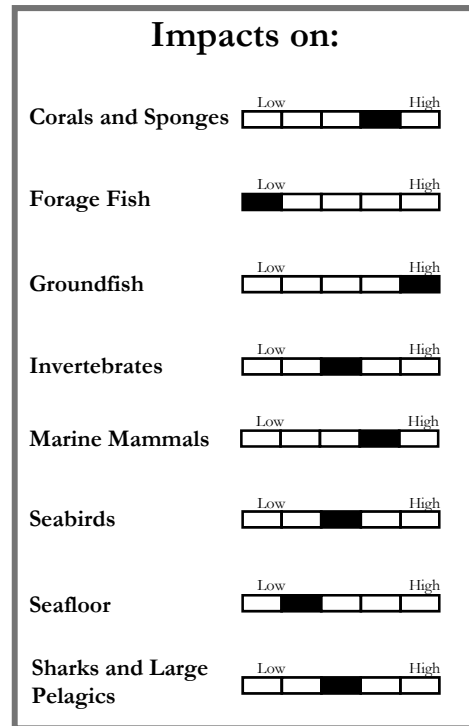
In your opinion, which of these sets of impacts, A or B, do you consider

C-P11

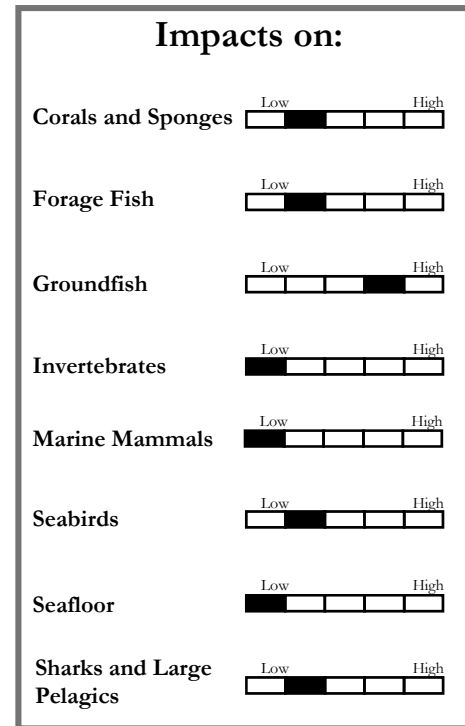
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



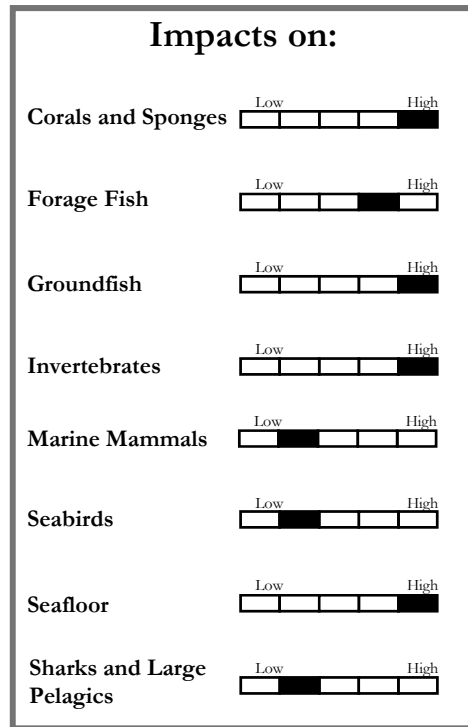
In your opinion, which of these sets of impacts, A or B, do you consider

C-P18

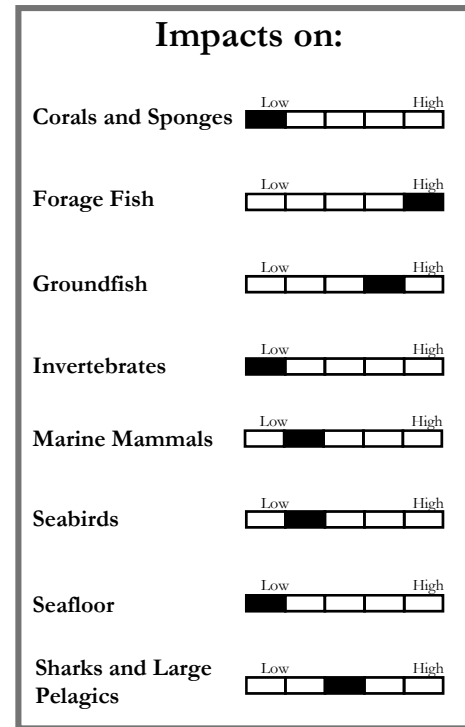
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



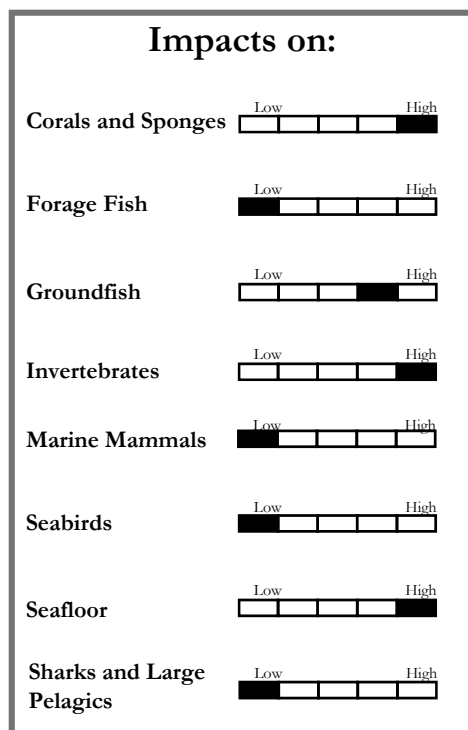
In your opinion, which of these sets of impacts, A or B, do you consider

C-P40

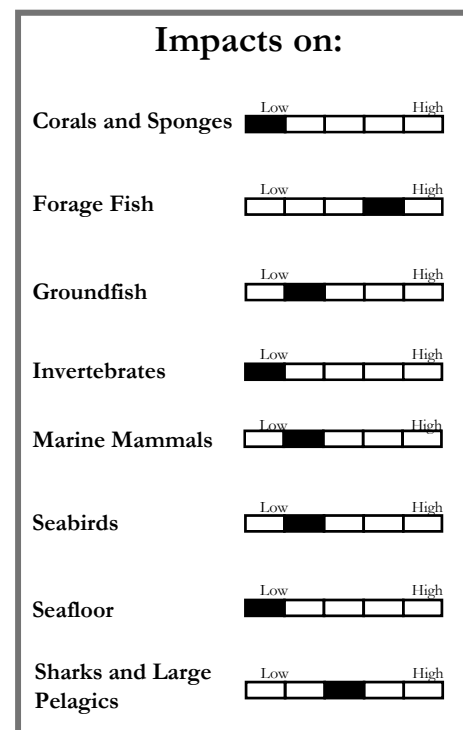
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



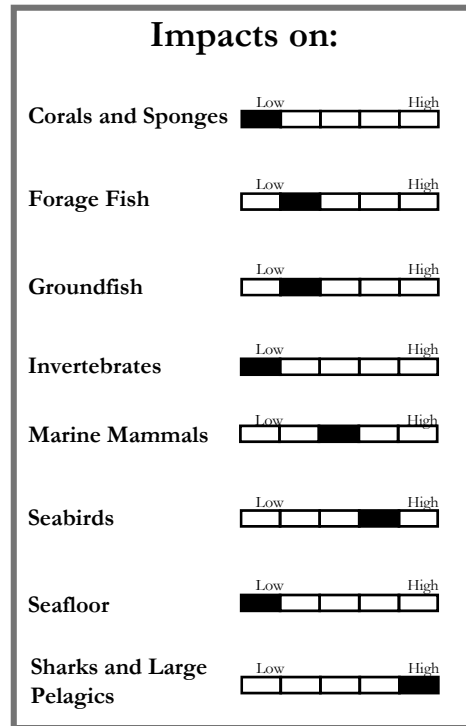
In your opinion, which of these sets of impacts, A or B, do you consider

C-P36

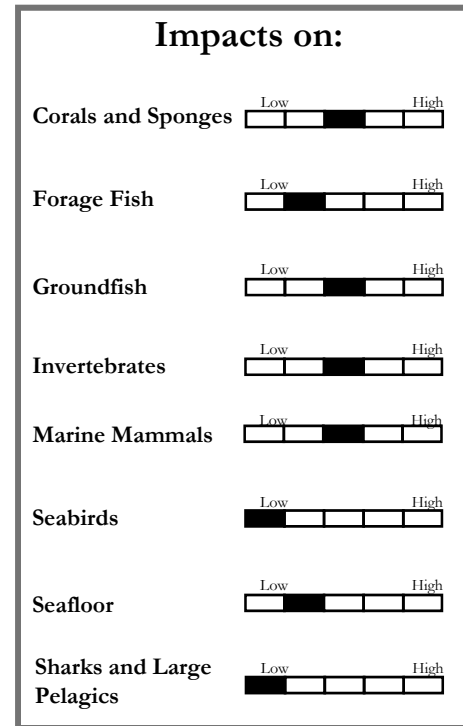
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



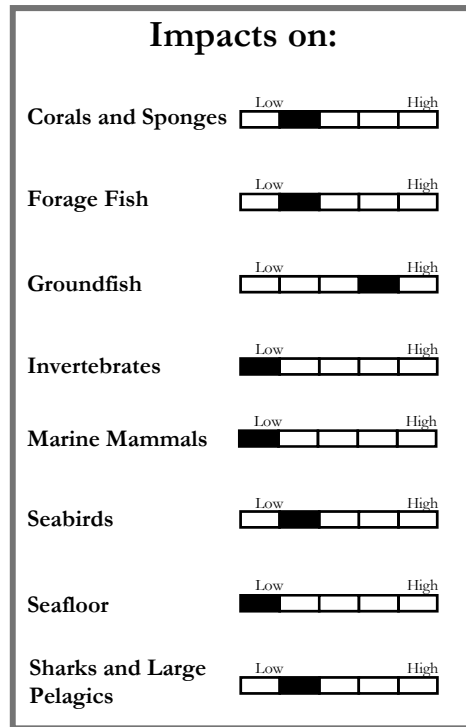
In your opinion, which of these sets of impacts, A or B, do you consider

C-P21

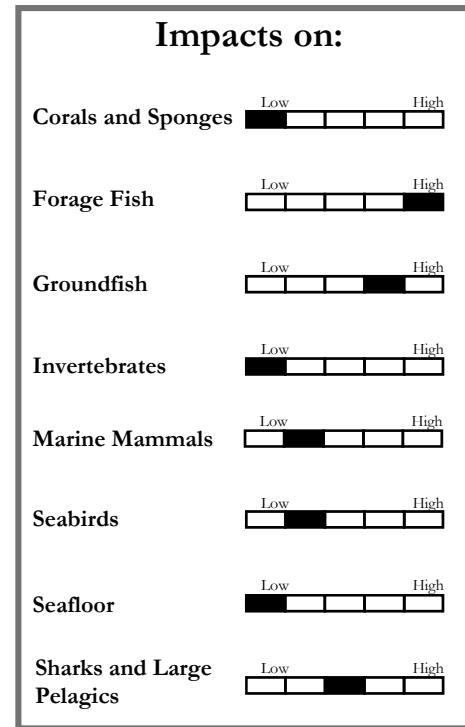
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



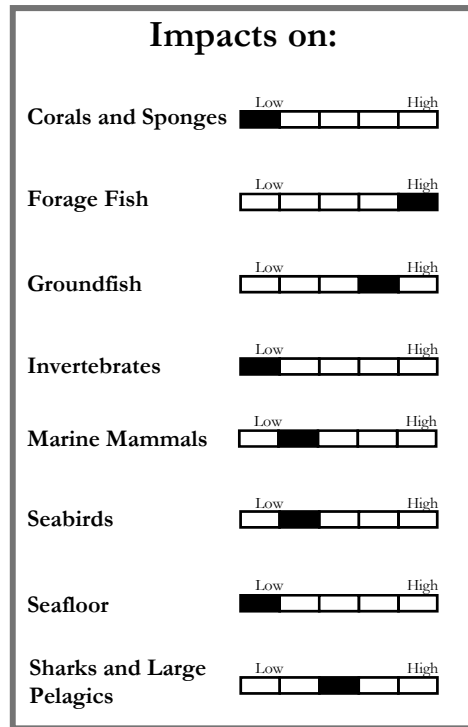
In your opinion, which of these sets of impacts, A or B, do you consider

C-P19

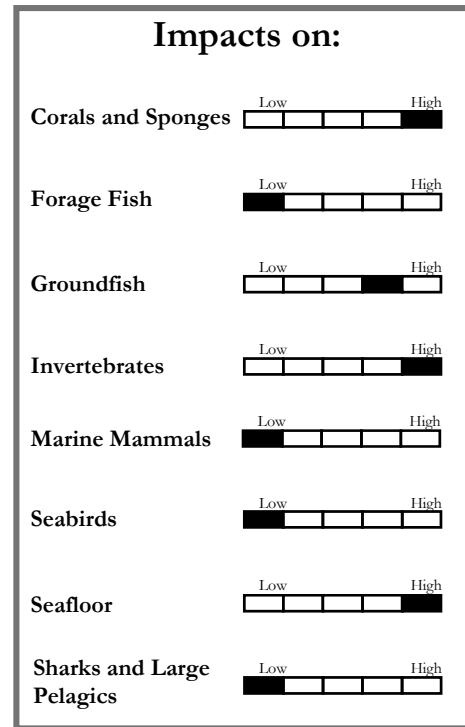
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



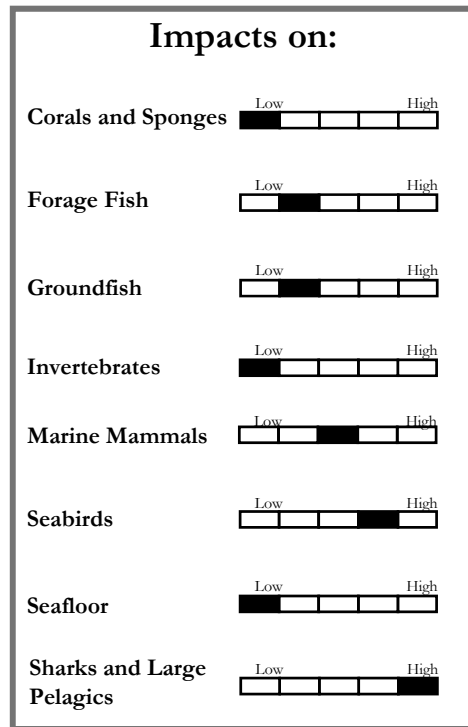
In your opinion, which of these sets of impacts, A or B, do you consider

C-P25

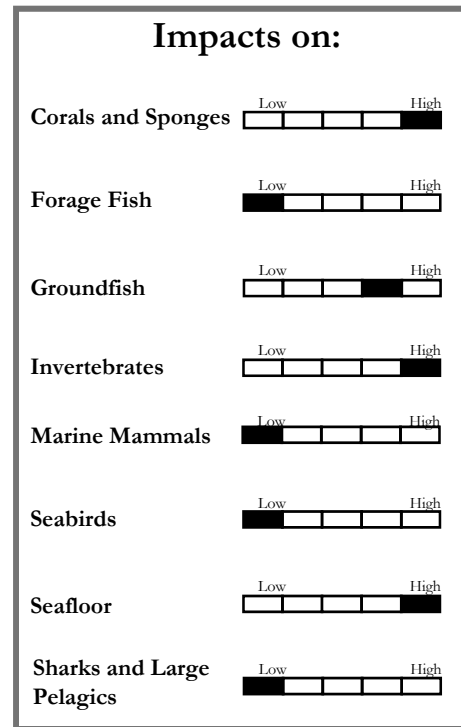
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



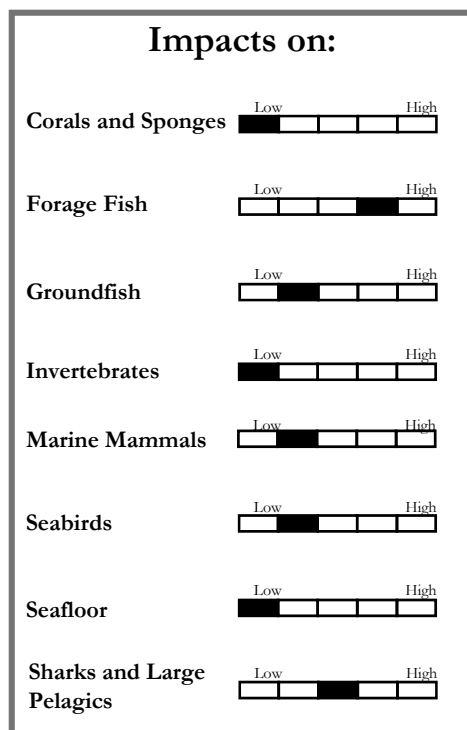
In your opinion, which of these sets of impacts, A or B, do you consider

C-P44

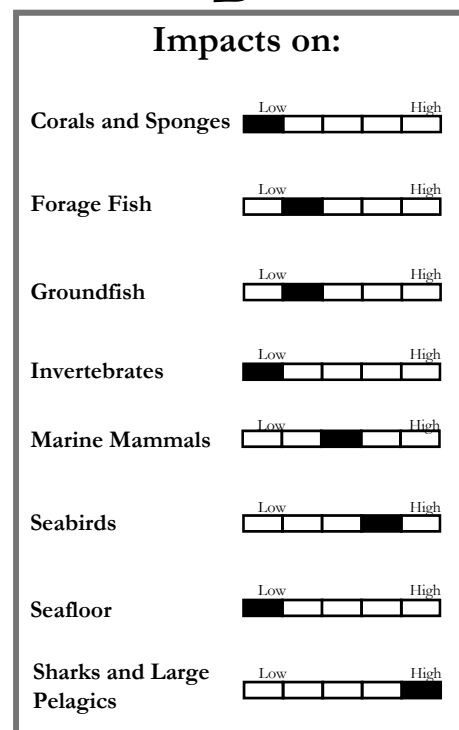
ECOLOGICALLY MORE SEVERE?

(Please circle A or B)

A



B



INFORMATION ABOUT YOURSELF

Please provide us some information about yourself, by answering the following questions. *If you do not wish to respond to a particular question, please leave it blank.*

(1) Gender: Female Male

(2) Age: Under 30 31- 40 41- 50 51- 60 61- 70 Over 70

(3) Highest level of education you have achieved: (please check one)

- High school graduate Attended some college
 Bachelors degree Post-graduate degree

(4) Current occupation: _____
How many years in this occupation? _____ years

(5) Which fisheries or marine environment are you most familiar with: (check all that apply)

- Arctic Atlantic Pacific

Please specify region(s): _____

(6) Are you a member of any fishing organizations or environmental groups?

- No, Yes (please indicate) _____

(7) In general, which criteria were most influential in making your decision about the severity of impacts?

Bycatch Habitat Equal

(8) When making decisions about the severity of bycatch impacts, which bycatch groups were most important? Please rank the top THREE:

___ Seabirds ___ Marine mammals ___ Large pelagic fish
___ Forage fish ___ Groundfish ___ Invertebrates

(9) Do you have at sea experience on board a commercial fishing vessel?

No, Yes (please list the types of fishing) _____

Additional Comments: _____

