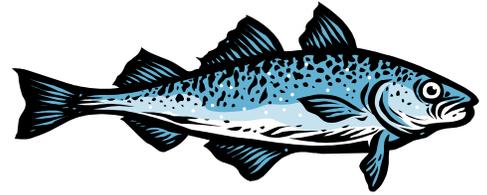


Implementing ACLs and AMs

Exercise A



Stock: Yellow-eyed cod

This stock hosts one of the most prominent fisheries in your region. In the previous exercise, you went over the assessment results for yellow-eyed cod.

Fishery: High value, commercial harvest and recreational harvest

Last assessed: This year

Status: Overfishing = yes; overfished = no

Management: The Council has been managing this stock with annual catch limits since 2011. The FMP specifies the total ACL divided equally between recreational and commercial sectors. The commercial sector has three seasonal fisheries - each 4 months long starting on January 1 - where the ACL is allocated 25%, 50%, 25%. The recreational management measures, including season and bag limits, are specified annually. For the last season, the recreational sector was open all year, with a two fish bag limit of 18" or greater fish. Commercial vessels report landings weekly. Recreational has no reporting requirements.

Science: The latest assessment found that overfishing is occurring and the stock is approaching an overfished condition (biomass is declining).

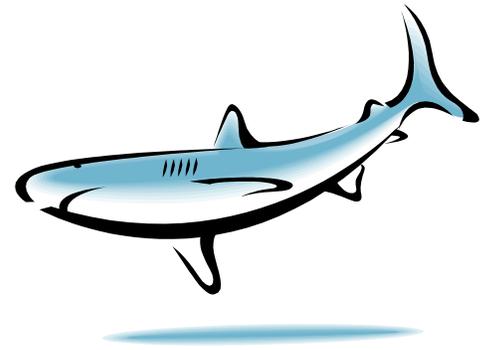
Your task: Given the information provided, and using the ABC control rule adopted in the previous exercise, come up with appropriate ACL and ACT for this fishery. Discuss recommendations with the group.

ABC control rule	ABC recommendation (% decline from current level)	ACL	ACT
Status Quo: P*=49.9%	49,500 mt (2% decline)		
Option A: P*=45%	44,000 mt (12% decline)		
Option B: P*=40%	40,000 mt (20% decline)		
Option C: P*=25%	30,000 mt (40% decline)		

MSY	54,500 mt
OFL	54,500 mt
AMs	Time/area closures (commercial and recreational), overharvest payback (commercial)

Implementing ACLs and AMs

Exercise B



Stock: Shadow shark

This stock hosts a small fishery in your region. In the previous exercise, you went over the assessment results for shadow shark.

Fishery: Commercial harvest, negligible recreational harvest

Last assessed: This year, previous assessment results discarded

Status: Overfishing = no; overfished = unknown

Management: The Council has been managing this stock with an annual catch limit set at recent average landings since 2011. That level is 1,775 mt. The only management mechanism for this stock is a minimum fish size and gear restrictions. There are no seasons and the fishing year runs January 1 through December 31. Commercial vessels report landings weekly. There is negligible recreational fishing for this stock.

Science: The latest assessment found that overfishing is not occurring, but due to uncertainty in the estimates, could not determine if the stock is overfished. The SSC determined that, based on the available information, shadow shark could likely maintain the current level of landings, but the discard mortality may be unsustainable.

Your task: Given the information provided, and using the ABC control rule adopted in the previous exercise, come up with appropriate ACL and ACT for this fishery. Discuss recommendations with the group.

ABC control rule	ABC recommendation (% decline from current level)	ACL	ACT
Status quo: recent avg. catch (assume negligible discard mortality)	1,775 mt (0% decline)		
Option A: recent avg. catch (assume discard mortality = 400 mt/year)	1,375 mt (23% decline)		
Option B: recent avg. catch (assume discard mortality = 600 mt/year)	1,175 mt (34% decline)		

MSY	Undetermined
OFL	Undetermined
AMs	Closure of the directed fishery when 100% of the ACL is reached.