Fish Banks

- You will play the role of a fishing company
  - Competing against other companies
  - Dealing with variations in fish populations and catch
- Let's go over:
  - The number of teams operating in the ocean
  - Rules for buying, selling and ordering ships
  - Operating costs, fish prices, fishing effectiveness and parameters governing fish reproduction

Your Goal

Maximize your Net Worth at the end of the game.

Net Worth =

Bank Balance **$**

+ Value of Fleet 

The winner is the team with the highest Net Worth at game end

Annual Profit

Profit = Turnover – Expenses

($/year)

- **Fish Sales**
- **Ship Sales**
- **Interest Earnings**

- **Operating Costs**
- **Ship Purchases**
- **New Ship Orders**
- **Interest Charges**

Turnover

- **Fish Sales = Catch * Fish Price**
  ($/Year) (Fish/Year) * ($/Fish)

Fish Price* = *$20/fish

- **Ship Sales = Ships Sold * Ship Price**
  ($/Year) (Ships/Year) * ($/Ship)

***Ship Price* set by auction**

- **Interest Earnings = Minimum Bank Balance * Interest Rate**
  ($/Year) ($) * (%/Year)

Interest earned only if Minimum Balance is positive.
Interest Rate = 5%/year

Expenses

- **Operating Costs ($/Year) = Annual cost for ships deployed to: Harbor, Coast, and Deep Sea**

  Harbor: $50, Coast: $150, Deep: $250 per ship per year

- **Ship Purchases ($/Year) = Ships Bought (Ships/Year) * Ship Price ($/Ship)**

  Ship Price set by auction

- **Interest Charges ($/Year) = Minimum Bank Balance ($) * Interest Rate (%/Year)**

Interest charged whenever Minimum Balance is negative. Interest Rate 10%/year.

Expenses (continued)

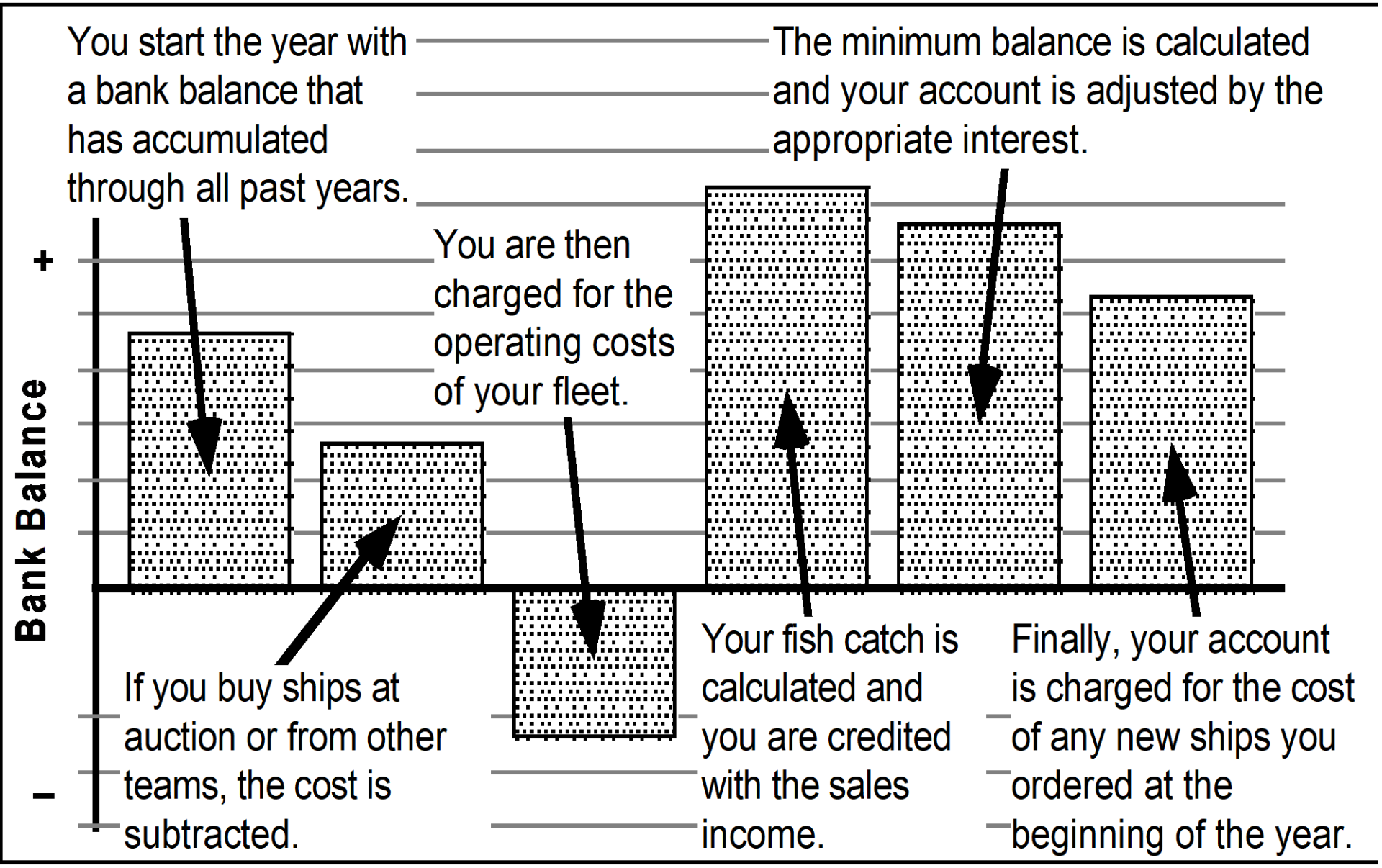
- **Each year you may order the construction of new ships.**
- **You pay for these ships this year and take delivery at the start of next year.**
- **New Ship Purchases = Ships Ordered * New Ship Price**

  ($/Year) (Ships/Year) * ($/Ship)

  New Ship Price* = *$300/Ship

  ***Maximum New Ship Order* is half of your current fleet (initial fleet + auction purchases), rounded up to the nearest whole number.**

Sequence of Debits and Credits



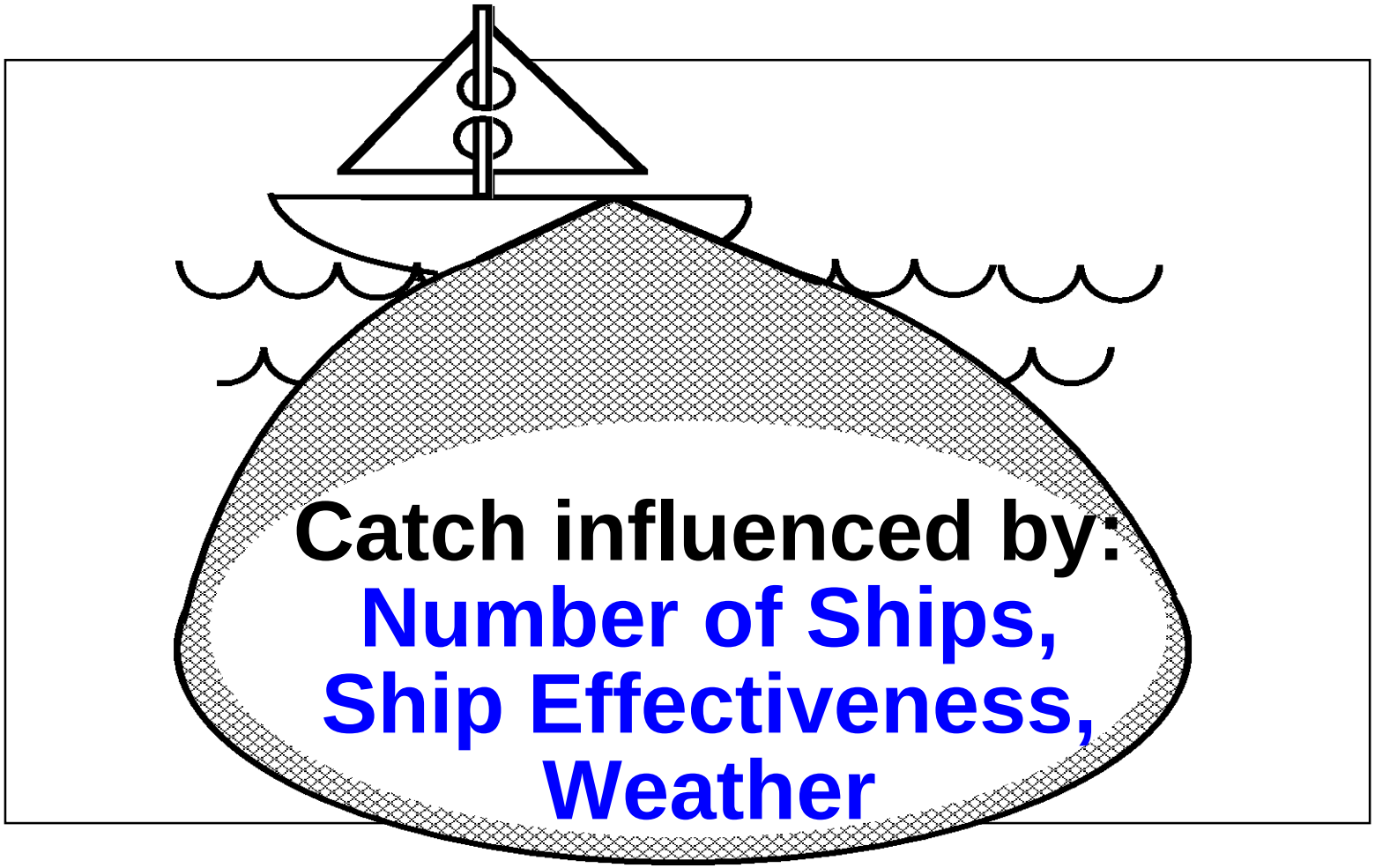
Fishing Fleet

- **Initial Fleet** =
  3 Ships/team

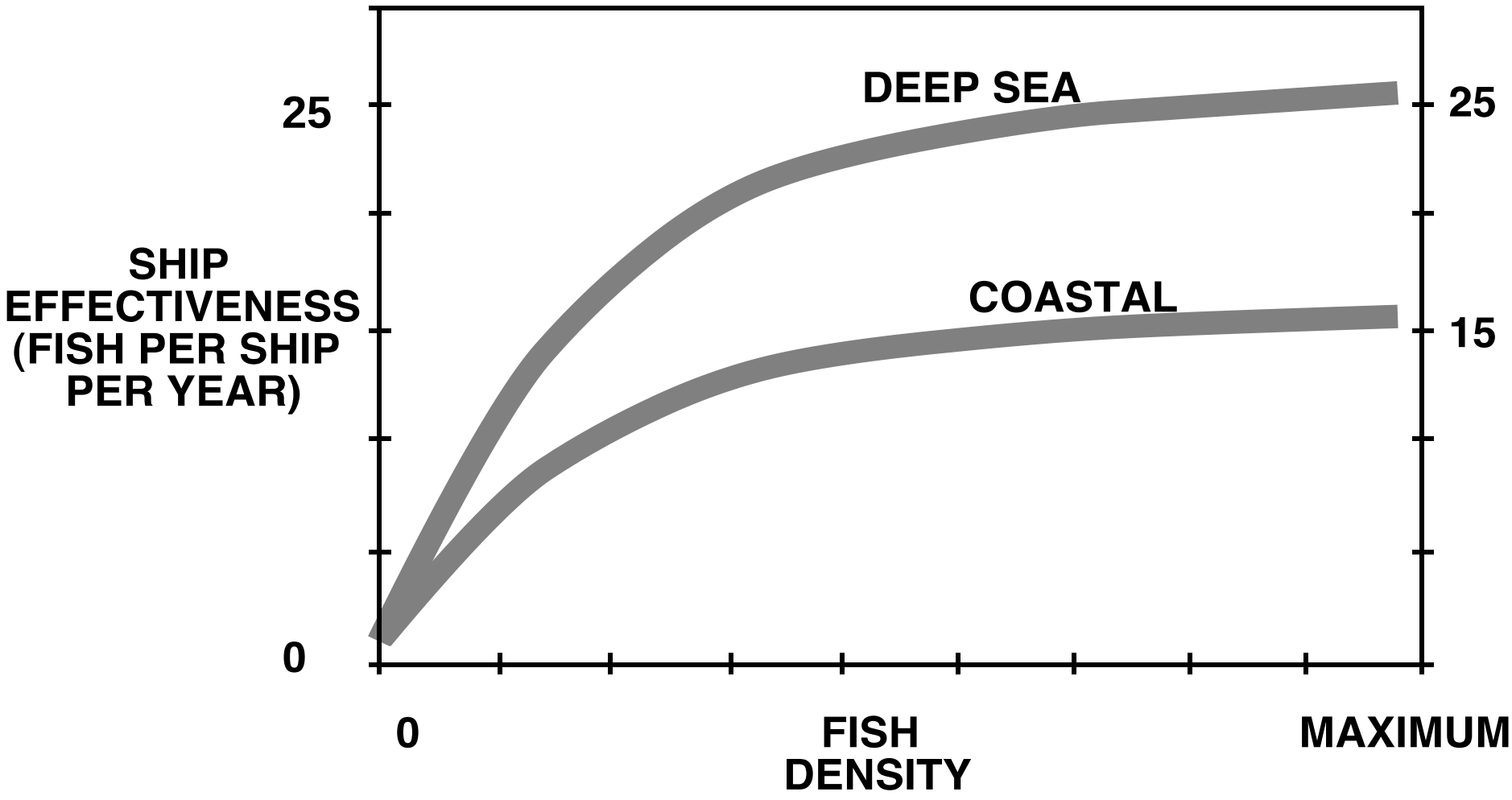
- **Fleet Growth**
  - **Purchase from other teams or via bank auctions**
  - **Order new ships**

- **Fleet Reduction**
  - **Sales to other teams via auctions**

Catch


Catch influenced by:
Number of Ships,
Ship Effectiveness,
Weather

Ship Effectiveness



Ship Salvage

At the end of the game your ships will be scrapped. Their salvage value, the average value of annual profits earned by all ships in the ocean during the past two years, is included in your total assets. You may not scrap ships before the end of the game.

Fishing Areas

Deep Sea

Maximum Population
2000 - 4000 Fish

Annual Operating Cost
$250 per Ship-Year

Productivity
(Max Ship Effectiveness)
25 (Fish/year)/ship

Coast

Maximum Population
1000 - 2000 Fish

Annual Operating Cost
$150 per Ship-Year

Productivity
(Max Ship Effectiveness)
15 (Fish/year)/Ship

Profit Example

1 SHIP TO DEEP SEA

FISH SALES = 25 X $20	$500	
OPERATING COST	- $250	
DEEP SEA SUBTOTAL		$250

1 SHIP TO COASTAL

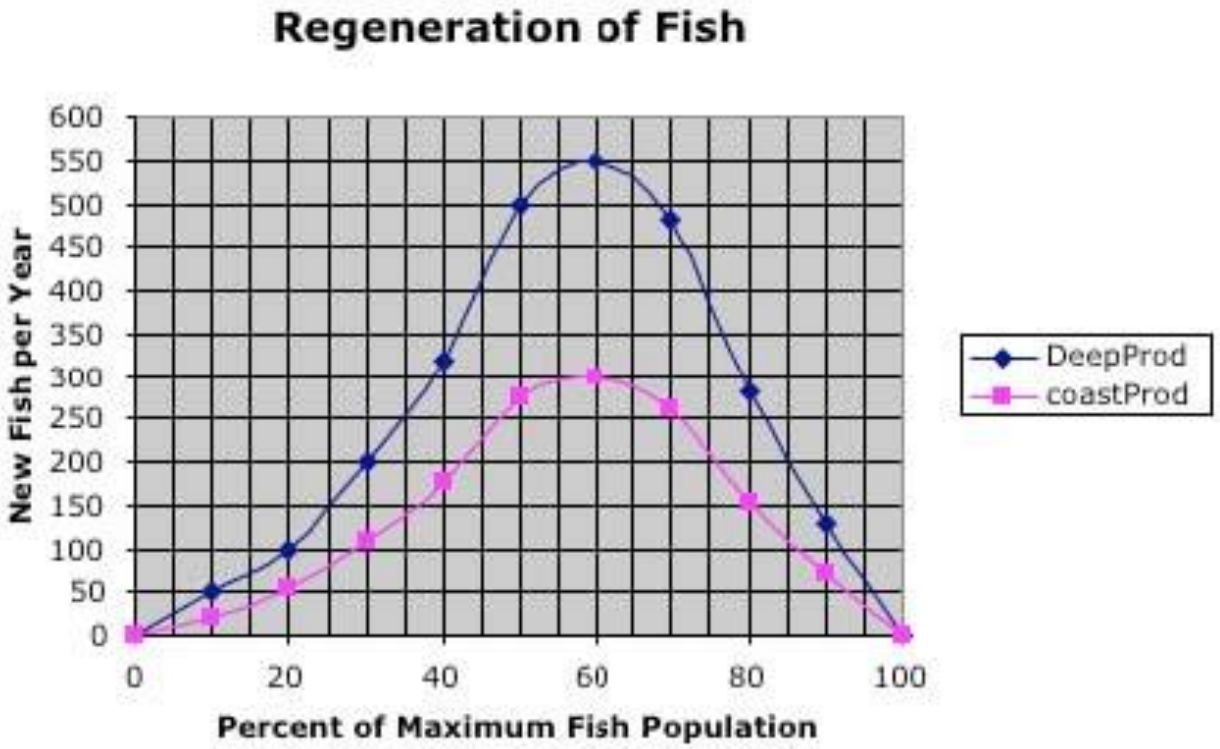
FISH SALES = 15 X $20	$300	
OPERATING COST	- $150	
COASTAL SUBTOTAL		$150

1 SHIP TO HARBOR

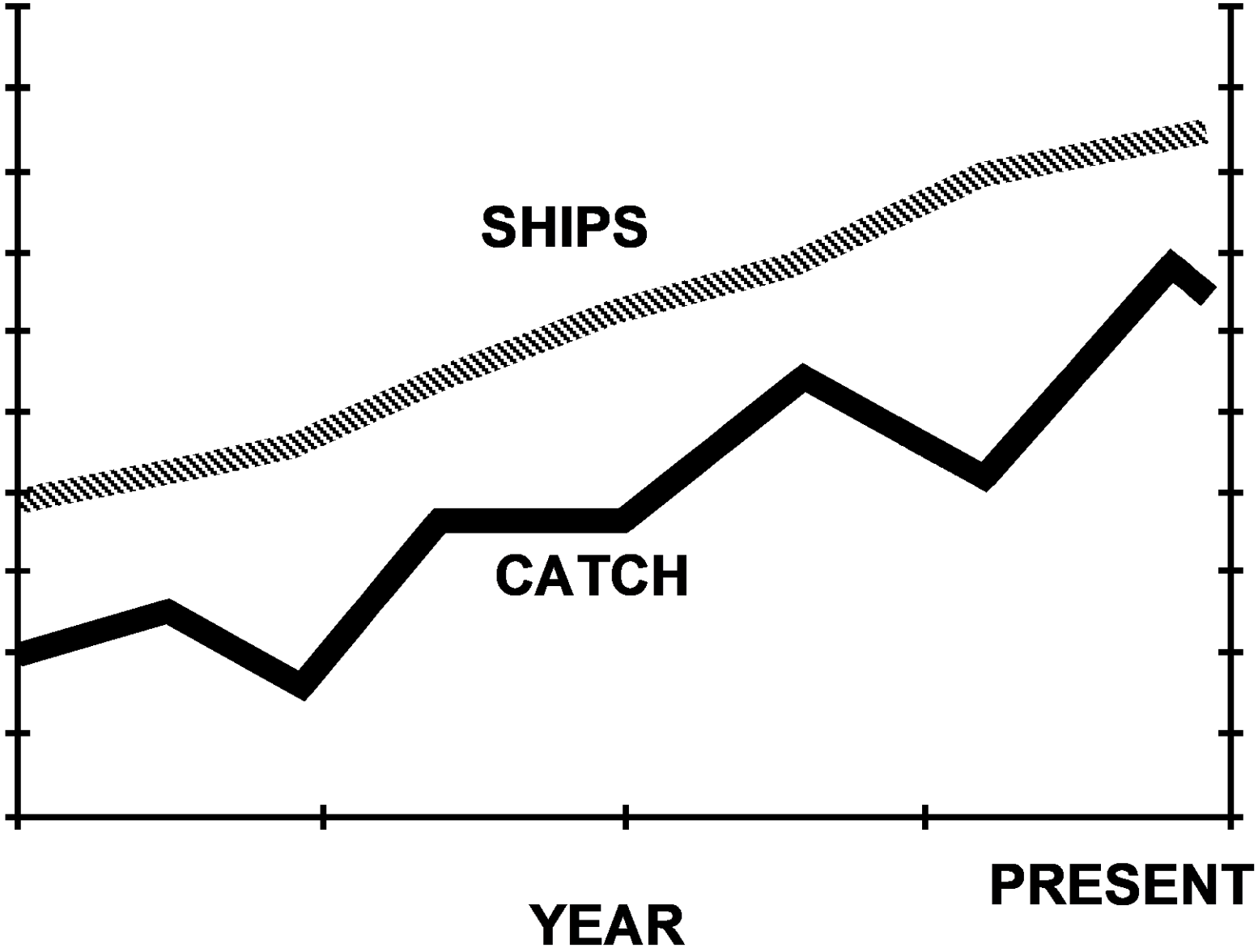
HARBOR COST	- $50

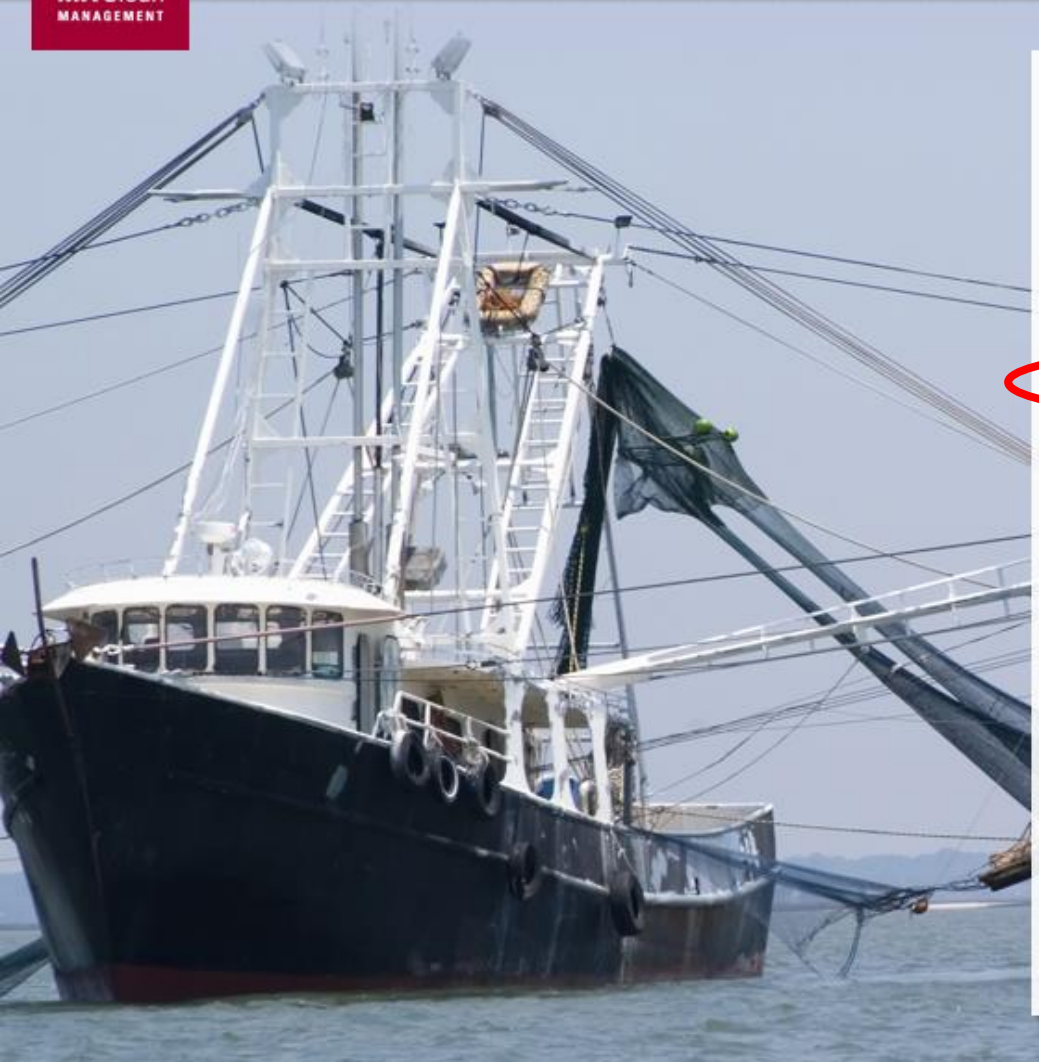
PROFIT **$350**

Net Recruitment



Recent History of the Fisheries





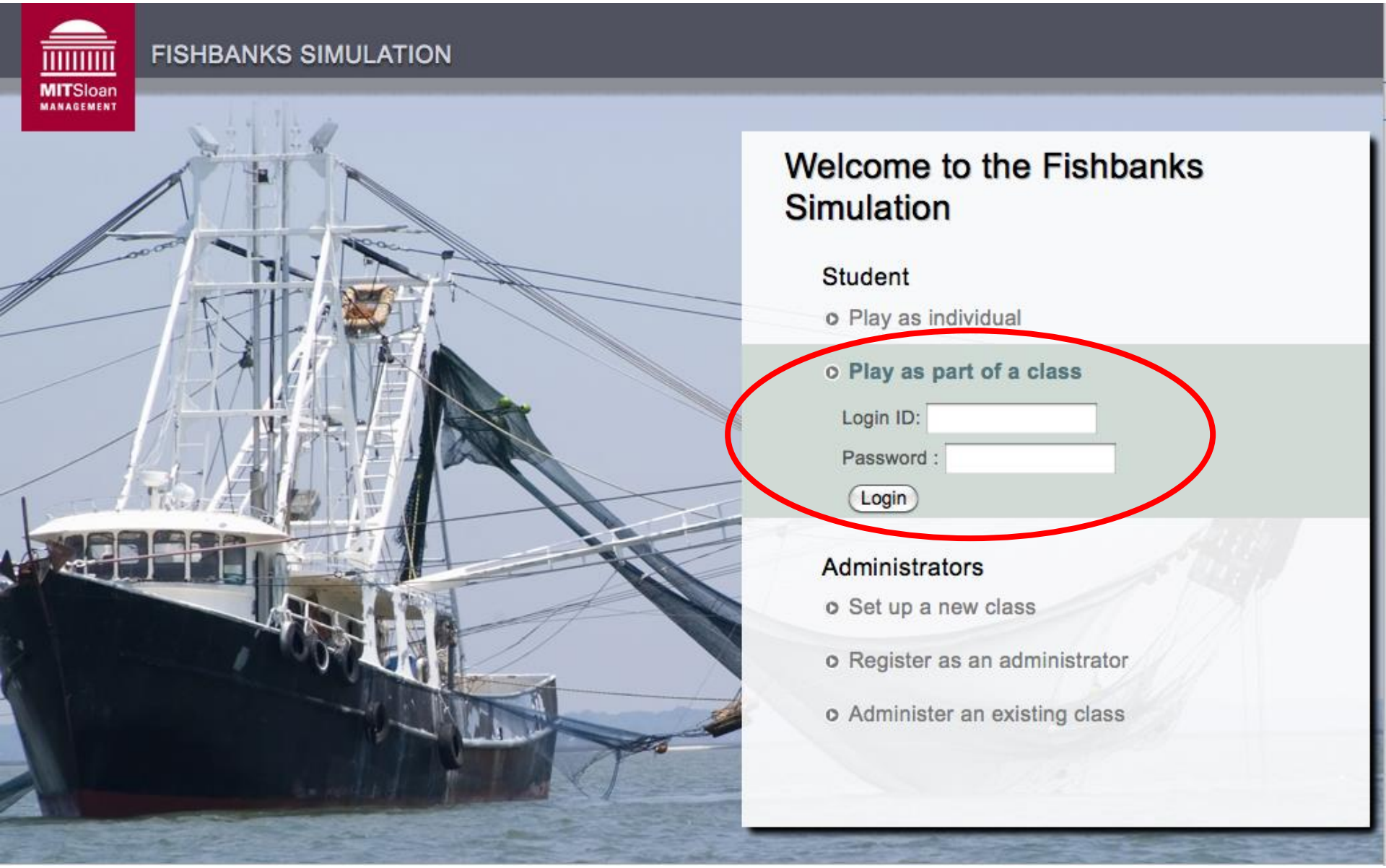
Welcome to the Fishbanks Simulation

Student

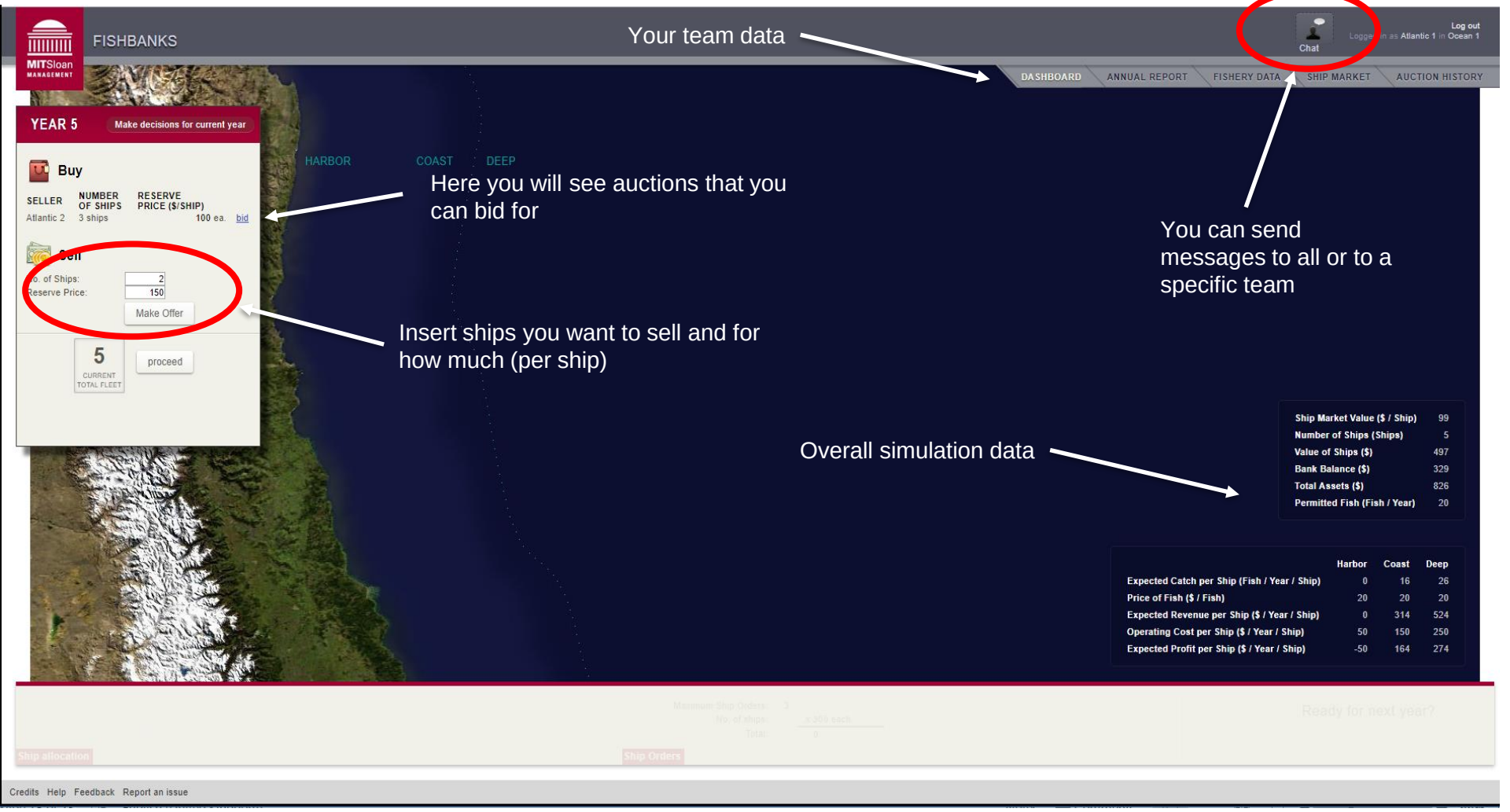
- Play as individual
- Play as part of a class

Administrators

- Set up a new class
- Register as an administrator
- Administer an existing class

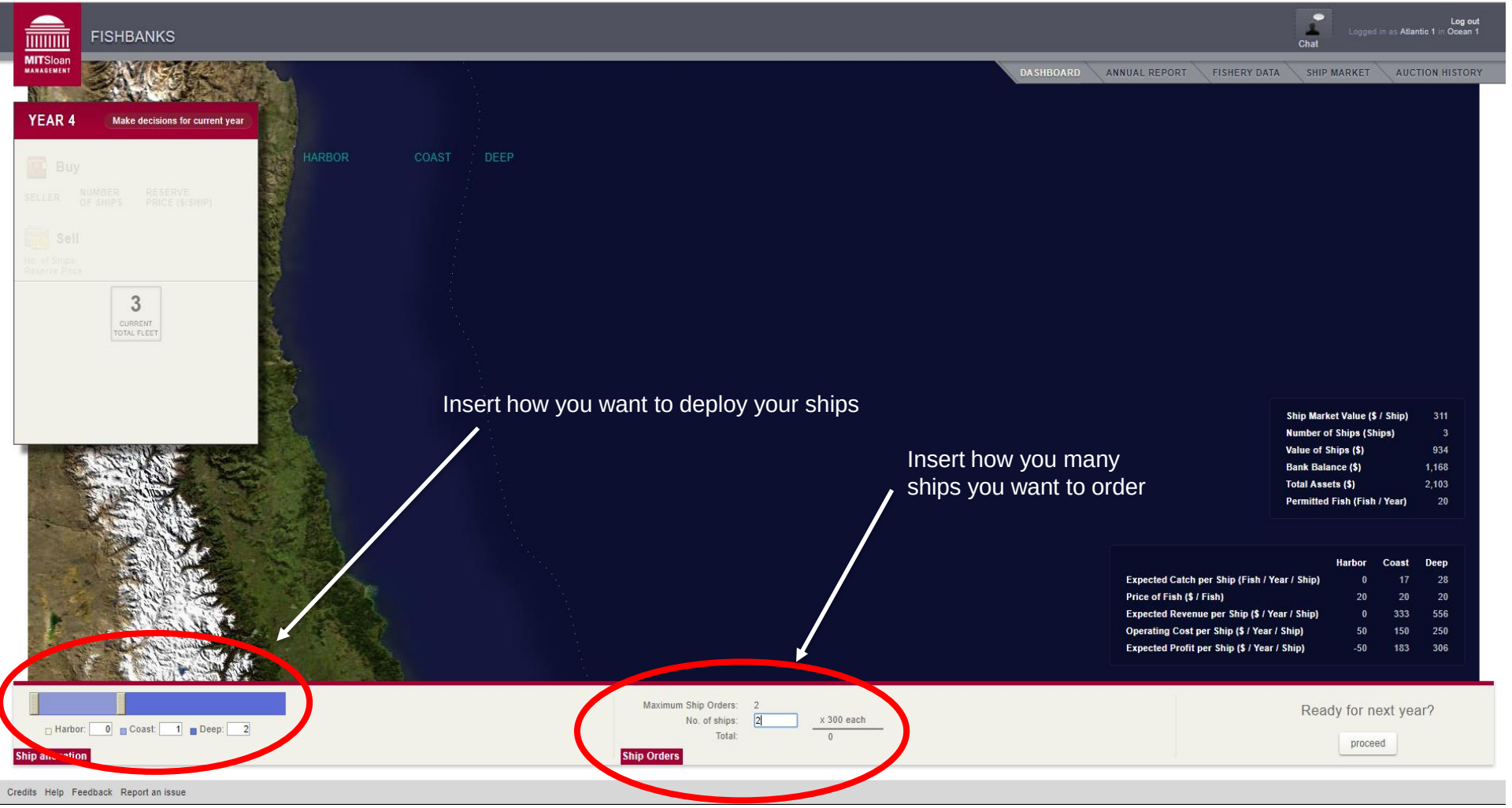

MITSloan
MANAGEMENT
FISHBANKS SIMULATION
Welcome to the Fishbanks Simulation
Student
Play as individual
Play as part of a class
Login ID:
Password :
Login
Administrators
Set up a new class
Register as an administrator
Administer an existing class

Data entry phase 1: Selling and buying ships



Click on proceed when ready (5 minutes first phase… might reduce afterwards).

Data entry phase 2: Deployment of ships and new ship orders



Click on proceed when ready (5 minutes first phase… might reduce afterwards).
At least 8 rounds will be played

Let's Go Fishing

Winslow Homer, Fishing Boats, Key West (1903)

To Log On:

http://bit.ly/fishbanks

(http://forio.com/simulate/mit/fishbanks/simulation/login.html)

Develop your Strategy

1. **Your goal is to end the game with the maximum possible assets.**

2. **Discuss within your team what strategies for boat acquisition and allocation you will follow to attain this.**

3. **Write your strategy down.**