





Virginia Evans Jenny Dooley Mark Glendale



## Scope and Sequence

Unit	Торіс	Reading context	Vocabulary	Function
1	The Fishing and Seafood Industry	Webpage	catch, fishing, freshwater, handle, harvest, ocean, package, process, seafood, transport	Using comparatives
2	Parts of a Ship: Exterior	Excerpt	bulwark, hull, keel, mast, propeller, screw, stem, superstructure, waterline, weather deck	Discussing progress
3	Parts of a Ship: Interior	Textbook excerpt	bulkhead, compartment, deck, hatch, head, ladder, overhead, partition, passageway, watertight door	Describing order
4	Harvest Methods and Gear 1	Textbook excerpt	bunt, cast net, gill net, net, otter trawl, purse seine, pursing cable, tangle, tom, trammel net, trawling	Comparing and contrasting
5	Harvest Methods and Gear 2	Product listings	basket trap, crab pot, heart, leader, lobster pot, pot, pound net, soak, trap net, weir	Asking for clarification
6	Harvest Methods and Gear 3	Job postings	dredge, hand line, hand pick, hook-and-line fishing, longline, pole and line, rake, setline, tongs, troll line	Describing experience
7	Types of Fish 1	Encyclopedia excerpt	bottomfish, cod, flounder, goosefish, groundfish, haddock, hake, halibut, pollock, sea bass, sole	Describing expectations
8	Types of Fish 2	Report	anchovy, cobia, herring, mackerel, mahi-mahi, opah, pelagic fish, sardine, swordfish, tuna	Describing change
9	Mollusks	Order form	abalone, clam, conch, geoduck, mollusk, mussel, octopus, oyster, shellfish, squid	Politely asking someone to wait
10	Crustaceans	Webpage	American lobster, blue crab, cancer crab, crustacean, king crab, molt, pandalid shrimp, penaied shrimp, shell, spiny lobster	Confirming information
11	Nautical Measurements	Textbook excerpt	cable, depth, distance, fathom, foot, gross ton, knot, nautical mile, speed, weight	Estimating time
12	Nautical Directions	Training handbook excerpt	abaft, aft, astern, below, bow, forward, inboard, outboard, port, starboard, stern, topside	Directing fast movement
13	Safety	Safety poster	dogged, emergency escape, flashlight, hooked, life preserver, lifeboat, personal floatation device, ring buoy, survival craft, water light	Describing importance
14	First Aid	Pamphlet	bandage, bleeding, blister, burn, chest compression, CPR, defibrillator, first aid, fracture, pulse, rescue breathing, shock, splint	Correcting an error
15	Weather	Webpage	fog, hail, hurricane, ice, icing, precipitation, rain, snow, swell, typhoon, wave, weather	Introducing bad news

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## **Scope and Sequence**

Unit	Topic	Reading context	Vocabulary	Function
1	Fishing Vessels 1	Webpage	beam trawler, fishing vessel, fleet, hold, otter board, otter trawler, pair trawler, side trawler, stern trawler, trawler, trawler/purse seiner, wet fish trawlers	Asking for an opinion
2	Fishing Vessels 2	Company inventory	American style, bait, dredger, gillnetter, hook, Japanese style, lift netter, longliner, pole-and-line vessel, seiner, trap setter, troller	Discussing timing
3	Fishing Vessels 3	Magazine article	factory barge, factory ship, factory squid jigger, fish processing vessel, freezer trawler, home port, longline factory vessel, mother ship, onboard, purse seine freezer vessel, super seiner	Describing pros and cons
4	Processing Finfish	Employee manual	bone-in, boneless, bread, debone, fillet, fin, gut, head, mechanical separation, mince, nonmechanical separator, scales, skinless, washing, batter	Asking about experience
5	Processing Crustaceans	Article	backfin, boil, claw, claw cracker, cocktail claw, cooler, flake, lump, market form, meat bone separator, pasteurized, retort, steam, topshell	Giving a reminder
6	Processing Mollusks	Article	beard, bill, blowing, shell liquor, half shell market, live, bivalve, meats per gallon, pop the hinge, shuck, shucking knife, wet storage	Warning someone about danger
7	Freshwater Fish	Newspaper article	bass, carp, catfish, commercial, contaminant, DDT, off- flavor, parasite, perch, pike, recreational, shelf-life, trout, whitefish	Discussing frequency
8	Sanitizing	Poster	CIP, clean, COP, foam, hardness, high pressure, iron, microorganism, pH, sanitize, sanitizer, salt, soil	Making a recommendation
9	Wastewater	Textbook excerpt	BOD, discharge, effluent, filter, FOG, offal, pollutant, screen, settling basin, TSS, viscera, waste treatment	Asking about importance
10	Waste Utilization	Email	biodiesel, by-product, carotenoid pigment, compost, consumption, fertilizer, maximize, mince, pharmaceutical, roe, waste utilization, yield	Expressing interest
11	Fish Oil and Meal	Webpage	antioxidant, bycatch, carbon treatment, crude fish oil, cuttings, evaporation, fish meal, fish oil, grinding, presscake, pressliquor, stickwater	Correcting an error
12	Handling Fresh Fish	Employee manual	bacteria, bruise, chill, contamination, cut, enzyme, fresh, handle, oxidation, shelf life, spoilage, temperature effect	Reacting to bad news
13	Packaging	Email	chilled, communication, containment, convenience, MAP technique, packaging, perishable, preserve, protection, rancidity, retail, vacuum packaging	Requesting more information
14	Storage and Freezing	Textbook excerpt	fast freezing, fatty, freeze, freezing rate, gaping, intrinsic value, lean, prefreezing treatment, rigor mortis, sharp freezing, storage life, storage, ultrarapid freezing	Expressing confusion
15	Transportation and Distribution	Contract excerpt	adequate, carrier, controls, distribution, dry ice, inspect, insulation, railcar, refrigerant, seal, shipper, transportation	Introducing yourself on the phone

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## **Scope and Sequence**

Unit	Topic	Reading context	Vocabulary	Function
1	Navigation	Course description	celestial navigation, chart, degrees, electronic navigation, fix, bearing, GPS, LOP, knot, latitude, longitude, minutes, nautical mile, plot, radar, radio beacon, range, position, seconds	Correcting an error
2	Tides, Winds, and Currents	Textbook excerpt	apparent wind, back, Beaufort Scale, current, drift, ebb, flood, high tide, low tide, relative velocity, set, tide, true wind, veer, wind, wind speed	Stating a negative opinion
3	Rules of the Road	Textbook excerpt	blame, burdened, collision, COLREGs, give way, head on, high seas, liability, privileged, responsible, right of way, rules of the road, stand on, underway	Politely requesting someone's attention
4	Towing, Mooring, and Anchoring	Course description	anchor, anchoring, cable, catenary, chain, fouled, in step, mooring, mooring line, pier, shod, shot, towing, towing hawser, tug	Discussing problems
5	Wire	Manual excerpt	core, fishhook, galvanized, kink, lay, length of lay, seizing, splice, strand, wear, wind, wire, wire rope	Asking for help
6	Marlinspike Seamanship 1	Manual excerpt	against the sun, bight, bitter end, coil, coil down, fake down, flemish down, line, marlinspike seamanship, part, take a turn, whipping, wire, with the sun	Giving a warning
7	Marlinspike Seamanship 2	Pamphlet	bend, bowline, breaking strain, hitch, knot, loop, parcel, secure, SF, SWL, turn, worm, spar	Correcting yourself
8	Blocks and Tackle	Encyclopedia entry	block, fall, fitting, frame, gun tackle, luff, purchase, runner, sheave, shell, single-whip, tackle, twofold purchase	Asking for help
9	Aquaculture	Letter	aquaculture, cage system, disease, enclosure system, flow-through system, interbreed, offshore, open-ocean, pen, pond system, recirculating system, submersible, wild	Asking for an opinion
10	Smoked and Dried fish	Webpage	bacteria, brine, cold-smoking, cure, dry, halophile, hot- smoking, preservation, rinse, salt, smoke, spoilage, threshold, water activity (a <sub>W</sub> )	Asking for clarification
11	Allergens and Toxins	Magazine article	allergen, CID, decomposition, enzyme, odor, parvalbumins, puffer fish, rot, scombroid poisoning, toxic, toxic bloom, toxin, tropomyosin	Expressing concern
12	Shellfish Safety	Textbook excerpt	biological, E. coli, food-borne, gastroenteritis, hepatitis A, hydrostatic pressure processing, illness, irradiation, listeria, microorganism, pasteurization, raw, salmonella, virus	Expressing relief
13	Warehouses and Food Security	Poster	access, food security, grounds, insects, inventory, novegetation strip, pallet, pest control, rack, rodent, slip sheet, tampering, vermin, warehouse	Discussing improvements
14	Crews / Positions	Job listings	administrative, captain, cook, crew, deckhand, engineer, fisherman, logistics, master, mechanic, medic, processor, sales, seaman	Discussing needs
15	Environmental Concerns	Magazine   article	collapse, deplete, ecosystem overfishing, endangered, extinct, fish stock, growth overfishing, moratorium, overfishing, recruitment overfishing, resource, sustainable	Describing change

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<b>Unit 14 – Crews / Positions</b>
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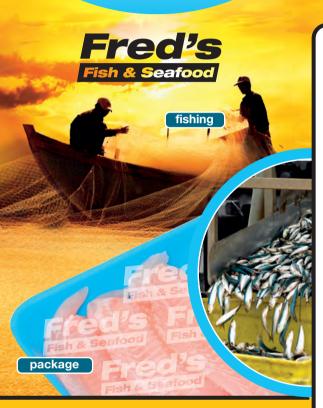
The Fishing and Seafood Industry

**Get ready!** 

1 Before you read the passage, talk about these questions.

- 1 What is the process of taking fish from harvest to retail sales?
- 2 Where are most of the fresh fish in your area caught?





Thank you for visiting our official website. Fishing is our passion.

Our expert fishermen and women catch and harvest our high-quality seafood. Some of them work on freshwater bodies of water. Other workers specialize in catching fish on ocean waters. Shipping associates prepare the fish for transport.

The transport of the seafood to our facility is quick. We want our customers to enjoy fresh seafood in their own homes. We process, handle, and package our products in modern facilities. We take pride in using the latest packaging technologies. Finally, we transport the seafood to a supermarket near you.

### Reading

- Read the webpage. Then, choose the correct answers.
  - 1 What is the purpose of the webpage?
    - A to discuss the latest technology in the seafood industry
    - **B** to provide information on a company's operations
    - C to provide general information on the seafood industry
    - **D** to compare freshwater fishing and saltwater fishing
  - 2 Which of the following is NOT a part of the company's operations?
    - A transporting the seafood to modern facilities
    - B catching freshwater fish
    - C putting fish and seafood in packages
    - **D** transporting seafood directly to customers' homes
  - 3 Who prepares fish for transport?
    - A freshwater fishermen
- C shipping associates
- **B** packaging managers
- **D** delivery drivers

### **Vocabulary**

Fill in the blanks with the correct words from the word bank.

	I U BAINK			
	fishing freshwater	seafood ocean		handle transport
1		is the a	ct of catching	or harvesting seafood.
2	To		_seafood is to	move it from one
	place to another	r.		
3		is	edible fish or	shellfish.
4		is	inland water	that is not salty.
5	To		_a fish is to to	ouch or hold it.
6	A(n)		is a large b	ody of salt water.
7	To		is to trap or	snare a fish.
8	To		_a fish is to w	rap it or place it in
	a container			

- 4 Read the sentence pairs. Choose the sentence that uses the underlined part correctly.
  - **1 A** Spring is the best season to <u>harvest</u> some types of fish.
    - **B** We catch freshwater fish in the ocean.
  - **2 A** We <u>process</u> the fish after they arrive at our facility.
    - **B** We <u>package</u> fish before we harvest them.
- 5 Listen and read the webpage again.
  Why does the company transport seafood to its facilities quickly?

### Listening

- 6 Solution Listen to a conversation between two managers. Mark the following statements as true (T) or false (F).
  - 1 \_\_ The speakers discuss how to handle a large harvest.
  - 2 \_\_ The man mentions that the freezer is not working correctly.
  - **3** \_\_ The speakers agree to increase the facility's hours of operation.

Manager 1:	I have good news and bad news.
Manager 2:	Oh boy. 1 the good news first.
Manager 1:	Well, the <b>2</b> was huge. The bad news is that our freezer is too small to hold it.
Manager 2:	Hmm. So the harvest was 3 than normal?
Manager 1:	Right. We need to <b>4</b> the fish immediately.
Manager 2:	I have an idea. Could we keep the factory open longer?
Manager 1:	Good idea. I can ask for volunteers to work <b>5</b>
Manager 2:	Sounds good. We'll pay them <b>6</b> their normal wage.

### **Speaking**

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

### **USE LANGUAGE SUCH AS:**

Tell me about ... / I agree that ... I'll see if ...

**Student A:** You are a manager. Talk to Student B about:

- news about a harvest
- a problem with the harvest
- possible solutions to the problem

**Student B:** You are a manager. Talk to Student A about the latest harvest.

### Writing

Use the conversation from Task 8 to fill out the webpage.







# Harvesting

Crab meat is harvested and processed in industrial plants. When crabs arrive at the plant they are washed and cleaned. After that, the crabs are placed into a large cooler. Workers then boil water in special containers to cook the crabs. The container is called a retort, and crabs steam during cooking. The steamed crab meat is pasteurized during the cooking process.

The cooked meat is removed by workers or by machines. Workers remove the topshell of the body to access the meat. The market forms of crab meat include lump, backfin, and flake. The claws and the legs also contain meat. Cocktail claws are whole crab legs sold in food stores. Crab legs are a popular food because they are easy to eat.

Machines are sometimes used in the process. A claw cracker can remove meat from claws. A meat bone separator removes meat from the bones and shells.

## **Get ready!**

- 1 Before you read the passage, talk about these questions.
  - 1 How do you prepare a crab for eating?
  - 2 What tools are used to process crabs?

### Reading

- 2 Read the textbook article. Then, choose the correct answers.
  - 1 What is the purpose of the article?
    - A to compare different types of crustaceans
    - **B** to describe the process of harvesting crab
    - C to explain the health benefits of eating crab
    - D to teach how to pick meat from claws
  - 2 Which of the following is NOT a step in processing crab?
    - A soaking the crabs in warm water
    - B putting the crabs in a cooler
    - C removing the legs and claws
    - D taking off the topshell
  - 3 Why are crabs cooked in a special container?
    - A to boil shells
- C to remove the legs

topshell

- **B** to trap the steam
- **D** to separate bones

### Vocabulary

Match the words (1-7) with the definitions (A-G).

**1** \_\_\_ boil

5 \_\_ pasteurized

2 \_\_ cooler

6 \_\_ topshell

**3** \_\_ claw

**7** \_\_ flake

**4** \_\_\_ lump

- A the outside covering of a crab
- B to heat a liquid
- C a small piece of crab meat
- D to heat and then cool a food
- E a container to store cold items
- F a body part of a crab removed in a whole piece
- **G** meat from the middle of a crab's body

1		tort / meat bone separator A container used for heating crab is a
	В	A processes harvested animals.
2	cla	aw cracker / market form
	Α	A tool that removes meat from crab claws is a
	В	Fish meat that is prepared to eat is in

## Listening

- 6 Solution Listen to a conversation between a manager and a worker. Mark the following statements as true (T) or false (F).
  - 1 \_\_ The crabs are still boiling.
  - 2 \_\_ The man thinks the batch is too small.
  - 3 \_\_ The claw pickers have not been cleaned yet.
- ↑ Listen again and complete the conversation.

Worker:	I'm just waiting for the blue crabs to 1 down.
Manager:	Sounds good. Those <b>2</b> look great.
Worker:	Yes, we should have some good 3 from this batch.
Manager:	What are you going to do next?
Worker:	I am going to take off the 4
Manager:	All, right. Don't forget to use the claw  5 for the meat.
Worker:	Oh, yeah. I looked on the rack and they weren't there.
Manager:	They're in the 6 bin by the sink. We just cleaned them.
Worker:	Great, thanks. I'll grab one right now.

## **Speaking**

8 With a partner, act out the roles below based on Task 7. Then, switch roles.

### **USE LANGUAGE SUCH AS:**

What are you working on right now?
What are you going to do next?
Don't forget to ...

**Student A:** You are a manager. Talk to Student B about:

- what he or she is working on
- the cooked crabs
- the steps of the process

**Student B:** You are worker at a processing plant. Talk to Student A about how to prepare crabs.

### Writing

Use the conversation from Task 8 to fill out the observation summary.

# Observation Summary

Observing Manager:
Employee:
Tasks observed:
Recommendations:

## **Glossary**

abaft [ADV-U12] If something moves abaft, is goes closer to the stern of a ship.

**abalone** [N-COUNT-U9] An **abalone** is a type of mollusk with an ear-shaped shell that contains several breathing holes. **aft** [ADJ-U12] If something is **aft**, it is toward the rear end of a ship.

**American lobster** [N-COUNT-U10] An **American lobster** is an edible crustacean with large claws that lives off the north Atlantic coast in North America.

anchovy [N-COUNT-U8] An anchovy is a small, common saltwater fish.

astern [ADJ-U12] If something is astern, it is behind a ship.

bandage [N-COUNT-U14] A bandage is a piece of material used to dress a wound.

basket trap [N-COUNT-U5] A basket trap is a type of trap commonly used for catching shellfish.

below [ADV-U12] If something moves below, it moves below the waterline or to a lower deck.

**bleeding** [N-UNCOUNT-U14] **Bleeding** is the escape of blood from the circulatory system, and can occur either inside or outside the body.

blister [N-COUNT-U14] A blister is fluid-filled swelling of the skin that results from a burn or irritation.

**blue crab** [N-COUNT-U10] A **blue crab** is an edible crab that is bluish in color and is common on the Atlantic and Gulf coasts of North America.

**bottomfish** [N-COUNT-U7] A **bottomfish** is a name for a group of fish that live and eat on the floor of a lake, river, or ocean.

**bow** [N-COUNT-U12] The **bow** is the front end of a ship.

bulkhead [N-COUNT-U3] A bulkhead is a watertight partition that separates different areas of a ship to avoid flooding.

bulwark [N-COUNT-U2] A bulwark is a barrier that extends up from the shell plating and protects the weather deck.

**bunt** [N-COUNT-U4] The **bunt** is the section of a net that holds the trapped fish.

**burn** [N-COUNT-U14] A **burn** is a type of physical injury caused by excessive heat, radiation, or exposure to harmful chemicals.

cable [N-COUNT-U11] A cable is a unit of measurement equal to 100 fathoms.

cancer crab [N-COUNT-U10] A cancer crab is a crab with short claws and an oval-shaped body.

cast net [N-COUNT-U4] A cast net is a circular, weighted net that is hand-thrown.

catch [V -T-U1] To catch fish or shellfish is to trap or snare it.

**chest compression** [N-UNCOUNT-U14] **Chest compression** is the rhythmic pressing of the heart of a victim of cardiac arrest in an effort to simulate a heartbeat and reestablish a normal pulse.

clam [N-COUNT-U9] A clam is a type of mollusk that burrows in the sand or mud and has a hinged shell.

cobia [N-COUNT-U8] A cobia is carnivorous, pelagic fish.

cod [N-COUNT-U7] A cod is a type of groundfish that has a white-colored line marking its body from the gill to the tail fin.

compartment [N-COUNT-U3] A compartment is an enclosed area, or room, on a ship.

conch [N-COUNT-U9] A conch is a type of mollusk with a large, spiral shell.

**CPR** [N-UNCOUNT-U14] **CPR**, or cardiopulmonary resuscitation, is an emergency medical procedure used to physically maintain blood circulation and brain function for victims of cardiac arrest.

crab pot [N-COUNT-U5] A crab pot is a trap for crabs that is usually round in shape.

**crustacean** [N-COUNT-U10] A **crustacean** is a marine animal with a segmented body, an exoskeleton, and paired, jointed limbs.

deck [N-COUNT-U3] A deck is a floor on a ship that extends all the way from one end of the ship to the other.

**defibrillator** [N-COUNT-U14] A **defibrillator** is a medical device that delivers electrical energy to the heart in an effort to reestablish a normal pulse.

depth [N-COUNT-U11] Depth is the measurement of the distance downward in a body of water.

distance [N-COUNT-U11] Distance is the measurement of space between two points.



Career Paths: Fishing & Seafood Industry is a new educational resource for fishing and seafood industry professionals who want to improve their English communication in a work environment. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. Career Paths: Fishing & Seafood Industry addresses topics including types of fish, parts of a ship, nautical language, storage, and types of factory ships.

The series is organized into three levels of difficulty and offers over 400 vocabulary terms and phrases. Every unit includes a test of reading comprehension, vocabulary, and listening skills, and leads students through written and oral production.

#### **Included Features:**

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