Generic Harvester Education

1. Overall_Intro

1.1 Shellfish Harvester Education Program



1.2 Shellfish Harvester Certification



Notes:

Narrative:

"Welcome to [Your States'] Harvesters education program.

This is a self-guided tour to help you meet the National Shellfish Sanitation Program's educational requirements.

You will choose the shellfish product important to you, because although the information you learn here applies to both, there are some differences along the way.

During this tour use the arrow buttons to progress through the slides."

1.3 Please select your shellfish to continue



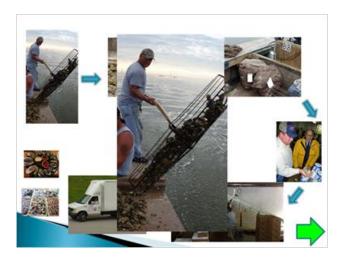
Notes:

Narrative:

"Please select the shellfish which you harvest most often to continue."

2. Oyster_branch

2.1 Untitled Slide



Notes:

Narrative:

"This tour will guide you through the various steps that are important to providing safe, top quality shellfish from [Your State].

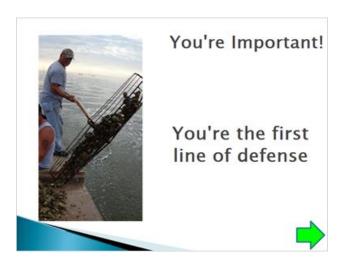
Once the tour is complete, you will have met the harvester educational requirements

The most important step begins with you, the harvester.

You will be the first line of defense protecting product safety and quality.

The product you harvest will be always be linked back to the initial day and location of harvest.

2.2 You're the first line of defense



Notes:

Narrative:

"You are important, you are the first line of defense!"

2.3 Why all the attention?



Notes:

Narrative:

"Why do oysters get so much attention?

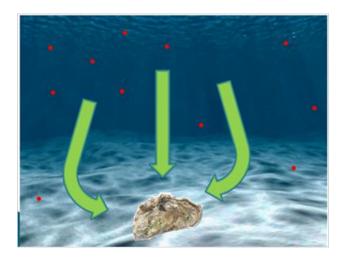
On rare occasions, people who enjoy oysters become ill.

Nothing is wrong with the oysters, it's the recipe! Traditionally, many consumers have preferred whole, raw or undercooked oysters. They eat the whole animal...RAW, or undercooked.

Think about it. Imagine doing that with another type of raw meat. What would happen if people ate raw chicken or raw hamburger?

The good news is that you're more likely to get sick from the other raw meat than raw oysters.

2.4 Untitled Slide

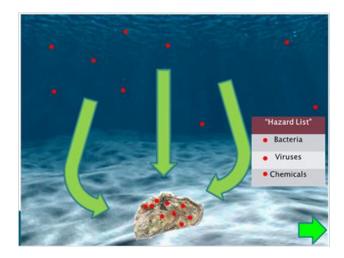


Notes:

Narrative:

"You see, shellfish are like a sponge. They collect everything from the surrounding water they live in, and they cant move to a new location."

2.5 Untitled Slide



Notes:

Narrative:

"Unfortunately some things in the water can be harmful if the product is eaten raw or undercooked...we'll call them the "Hazard List": bacteria, viruses, and certain chemicals.

State authorities monitor the hazard list to classify waters as either OPEN...or CLOSED. When you harvest in open waters, you're choosing clean water and avoiding the hazard list.

So location is one of the most important controls a harvester has."

2.6 Untitled Slide



Notes:

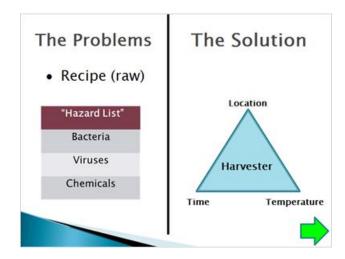
Narrative:

"In some cases naturally occurring Vibrio bacteria not found on the hazard list are in shellfish harvested from open waters.

When left too long in warm temperatures, these Vibrio bacteria could increase and cause serious illness.

Compare it to forgetting to put the milk back in the refrigerator. Given enough time left out at a warm temperature, the clean milk contains bacteria which can increase and turn the milk sour. "

2.7 The Problems



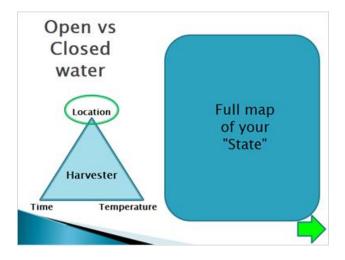
Notes:

Narrative:

"So you see we have a problem, naturally occurring Vibrio bacteria that can cause serious illness when eaten raw or undercooked. But we have a solution.

Since many consumers prefer the raw or undercooked recipe, controls are necessary to avoid the Hazard list. The harvesters controls are: location...time...and temperature...."

2.8 Open vs Closed water



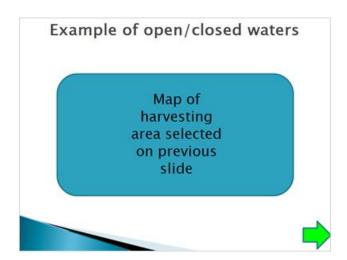
Notes:

Narrative:

"Lets begin with the harvesters first control...location.

Please select a region where you will be harvesting shellfish."

2.9 Example of open/closed waters



Notes:

Narrative:

"Your selection has led you to the following map.

Where do we get this information?

Well, based on monitoring for the "Hazard List", the State authorities provide information to harvesters on which areas are open and which are closed.

2.10 Untitled Slide



Notes:

Narrative

"The correct method is to contact the authorities directly.

2.11 Untitled Slide



Notes:

Narrative

"Now that you know the open areas, its time to go harvesting.

Going from harvest to your dinner plate involves a few steps along the way.

2.12 Tagging



Notes:

Narrative:

"The answer is proper tagging.

Why is this important?

Tags tell us a lot of things, but most importantly they give processors the 4 W's: Who (the harvester), When (including the date AND time it was harvested), Where (The Designated Shellfish Harvest Area)), and What kind of shellfish.

For example, here is a filled out tag.

It tells us WHO harvested the product, WHEN it was harvested, WHERE is was harvested, and WHAT type of shellfish it is.

 $\begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. The information on this tag follows the product from harvest to final point of sale. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \begin{tabular}{ll} Tags are the required evidence for harvest location, day, and time. \\ \bend{tabular}$

2.13 Tagging



Notes:

Narrative:

"The 4 W's"

2.14 Untitled Slide



Notes:

Narrative:

"Take a moment to review this tag, do you see anything wrong with it?

The tag is missing a complete harvest date, which should include Month...day...AND year, as well as the time."

2.15 Untitled Slide



Notes:

Narrative:

"What about this tag, do you see anything wrong?

The tag is missing the designated shellfish harvest area. "

2.16 Untitled Slide



Notes:

Narrative:

"What about this tag.....is there anything wrong?

The tag is complete, answering the 4 W's.

 $\label{thm:complete} \mbox{Remember to complete the tags and attach to the bagged shell fish before leaving the harvest area."$

2.17 The 4 W's



Notes:

Narrative:

"The 4 W's communicate the Harvester's controls of location, time and temperature. Now you understand why you are so important! You are the first line of defense."

2.18 Untitled Slide

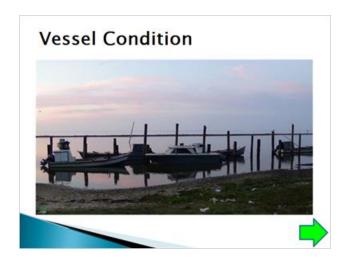


Notes:

Narrative:

"Now that we are done with tagging....lets move on to Handling."

2.19 Vessel Condition



Notes:

Narrative:

"Good harvesting begins with a good boat. Its indeed a working boat, but some work boats can be better than others.

Properly constructed and maintained vessels allow for consistent quality and safe products.

The vessel condition can be Good, Bad, or Ugly."

2.20 "The Good"



Notes:

Narrative:

"A harvest vessel is a working boat, it is designed to be sturdy, reliable, and get the job done. We understand it will get dirty, but they should be in the best condition reasonably possible and follow a few guidelines.

Good boats are constructed with sturdy materials and are reliable.

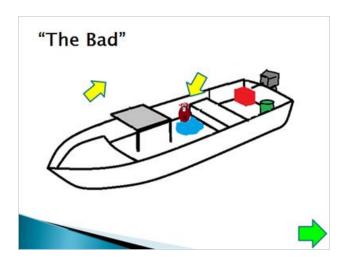
They have shading to protect shellfish from: Birds, the sun, and bad weather.

Sanitation devices must be placed on board to help protect the harvest area and shellfish from the hazard list.

Shellfish need to be kept off the deck of the boat out of bilge water and other contaminants.

Also, no animals are to be on board (dogs, cats, etc)"

2.21 "The Bad"



Notes:

Narrative:

"Some vessels come close to providing good working conditions, but may lack one or two key components....What about this boat that just returned from harvesting.....what few things could be improved?

As you can see there is nothing to cover and protect the shellfish from excessive heat. In addition to that, the shellfish are stored on deck and can be contaminated by filth and bilge water."

2.22 "The Ugly"



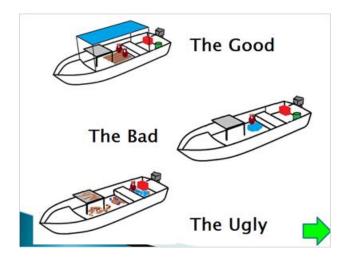
Notes:

Narrative:

"Some vessels fall short of the most basic requirements......do you see whats wrong with this boat?

As you can see, shellfish are stored in the bilge with oil, gas, and water.....there is no sanitation device on board......the culling tray is worn and unclean.....and there is nothing for shading."

2.23 Untitled Slide



Notes:

Narrative:

"As you can see, there is a huge difference between these boats and the product harvested will reflect this

To ensure a safe, high quality product, you must have a boat which reflects the points discussed:

- 1. Keep shellfish out of bilge water on a raised area to keep shellfish from contamination,
- 2. have a sanitation device on board,
- 3. provide shading to protect product,
- 4. and no animals on board

2.24 Vessel Sanitation



Notes:

Narrative:

"With proper construction, equipment, and maintenance, harvesters are able to maintain sanitary operation that prevents or reduce exposure of shellstock to the Hazard List.

But what is proper sanitation ...?"

2.25 Vessel Sanitation – On the boat



Notes:

Narrative:

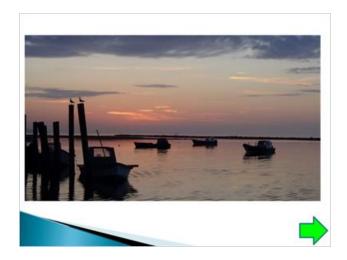
"Sanitation procedures include all the activities that harvesters use to prevent shellfish from accumulating contaminants in the Hazard List....

These include: Proper use of sanitary devices, preventing shellfish from being exposed to standing water, and protecting shellfish from bilge and excessive heat.

Sanitary devices are used to collect any human waste that could otherwise be dumped overboard and create a hazard in the harvest waters.

Overboard discharge can cause all shellfish from a growing area to be recalled & destroyed."

2.26 Untitled Slide



Notes:

Narrative:

"Proper vessel design and construction, along with sanitation procedures ensure harvest area and product are protected from contamination on the Hazard list"

2.27 Summary of Handling



Notes:

Narrative:

"[Your States] harvesters work hard every day to provide safe, quality shellfish to consumers.

Starting with a good boat, using proper sanitation procedures, and protecting the vital resource by harvesting properly.

You ensure the future of the shellfish industry.

So far you've selected your open harvest location, made sure you have a good, reliable boat, followed approved sanitation procedures, and properly tagged the harvest.

...Now its time to deliver the product!"

2.28 Untitled Slide



Notes:

Narrative:

"Now that were done with handling, lets keep moving through the tour! Please select Transportation."

2.29 Transportation



Notes:

Narrative:

"Now that we've got our shellfish properly bagged and tagged, we need to bring them home.

The harvester's responsibility continues though transport for unloading. This includes a few key points of concern.

- 1. how time and temperature effect your product,
- 2. Product exposure to heat and weather.
- 3. And who you can sell your product to"

2.30 Untitled Slide



Notes:

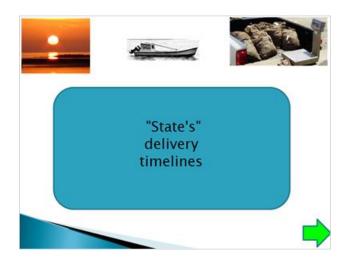
Narrative

"Remember, when products are left too long in warm temperatures, the bacteria within them could increase and cause harm to certain individuals who prefer the raw recipe.

Lets go back to the milk concept, if left out in the summer, the normally clean milk will sour much faster than if it were left out in the winter months.

The same can be said for oysters. In the warmer months the items on the hazard list, especially bacteria, increase much faster and can cause problems for consumers who prefer the traditional, raw or undercooked recipe. This is why it is important for shorter harvest times during the hot, summer months."

2.31 Untitled Slide



Notes:

Narrative

Oysters have very specific delivery time regulations. The time from harvest to refrigeration is important for the safety and quality of your oysters. Remember, harvest times are subject to change. Contact the proper authorities to stay up to date.

2.32 Product Exposure



Notes:

Narrative:

"There is another way to help protect your product from temperature abuse.

In the previous Handling section, we mentioned that a good work boat should have covering or shading to protect the product.

Protecting your harvest from problems like bird waste and adverse weather can help you avoid the items on the Hazard List.

Ideally, a canopy will protect and shade the product, and this is often the easiest solution.

Remember, A protected product equals a safe product.... you are there to make sure that happens!"

2.33 Trucking



Notes:

Narrative:

"Once you get your product to shore, you are still responsible for protecting the product while it is delivered to the dealer.

You need to deliver the product directly and immediately to a certified dealer and avoid making stops along the way.

While delivering your product, either in your truck or in your boat, you must follow similar guidelines as used on the boat in harvest waters. You don't want contact with gasoline or garbage; no animals should be present; and you want to protect your product from exposure. However, you want to avoid vinyl tarps or covers for protection because they do not breathe and will cause the temperature to go up."

2.34 Certified Dealers



Notes:

Narrative

"But what about after you harvest the product?

You are required to sell product to certified dealers because they are required to continue controls to assure product safety.

The harvesters responsibility for product care and protection ends with delivery to a certified dealer.

The dealer certification involves additional measures for continuing care to prevent food safety problems while maintaining a good, reputable, product. This is why harvesters are required to deliver their product directly to certified dealers."

2.35 Transportation Summary



Notes:

Narrative:

"So you see, once you harvest and handle the product, the goal for a safe, quality product is not over.

Following time and temperature requirements for harvest and delivery, along with minimum product exposure, and delivering product directly to a certified dealers facility ensures a protected product and minimizes problems from the hazard list.

Remember, you are the first person in the process of getting the product from harvest waters, to dinner platesyou are important!"

2.36 Untitled Slide



Notes:

Narrative:

"Finally, there are a few extra thoughts for consideration."

2.37 Who the Authorities are...



Notes:

Narration:

2.38 For further information:



Notes:

Narrative:

 $\hbox{``For further information, please refer to website of your States Authorities, or call one of their offices."}$

2.39 Untitled Slide



Notes:

Narrative:

"You are now finished with your training! Thanks you for your time and attention!"

3. Considerations

3.1 Untitled Slide



Notes:

Narrative:

To complete your training, please enter your name into the form, then, right click and select print.

Thank you!

3.2 Thanks and Considerations

