

# Module 3 ~ Invasive Plant Student Video Challenge (UE, MS, HS)

## Story Scenarios

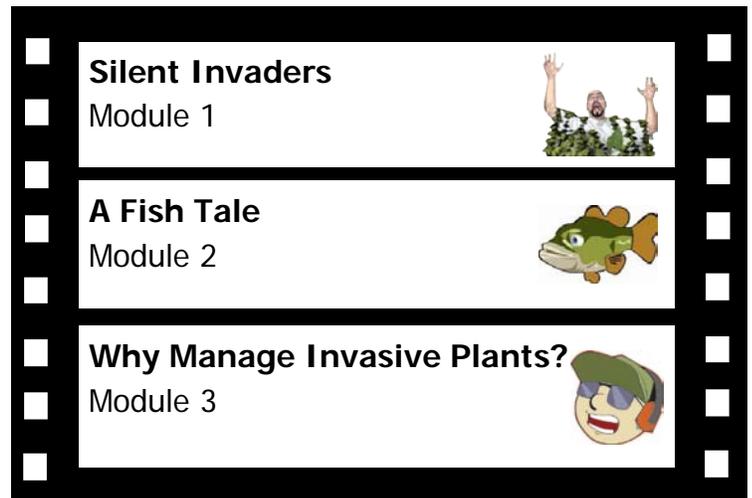


Dear student film makers,

The following scenarios are example stories which may be used for this invasive plant video project. Feel free to use these stories as they are presented or create your own scripts based on what you've learned about invasive plant problems in Florida.

Before you begin, be sure to watch these three presentations for background knowledge on the impact of invasive plants:

<http://plants.ifas.ufl.edu/education>



Lights...Camera...*Action!*



### What Makes A Good Story?

Storytelling is an art and there are many ways to do it. Developing a video from your story will require even more preparation and thought – and a willingness to let your creativity shine. We recommend spending time looking over the following materials before beginning your project (especially the director and/or writers).

See our YouTube Channel for examples of student videos and tutorials:

<http://www.youtube.com/user/UFIInvasivePlantsEDU>



## Story Scenarios



### Features of a Short Film Plot

**Hook** ~ Transition from real world to film world. This usually starts in the middle of a mess or mid-level climax to get the audience quickly into the story.

**Setup** ~ The lead character is introduced with external wants (plot goals) and internal needs (theme goals). Limits and rules of film world are established.

**Inciting incident** ~ An event happens that changes the status quo (what's normal), forcing protagonist to take action to restore what is normal.

**Journey into unknown** ~ Protagonist sets off to accomplish his goal, leaving what is safe and normal behind and entering the vast unknown (physically, emotionally, or spiritually).

**Investigation** ~ Protagonist searches for the goal object or information while encountering a series of obstacles, interactions, or conflict.

**Turning point / big twist** ~ A big plot twist, unexpected surprise, plot goal change, new information or unforeseen problems occurs to test the new change in the character.

**Final confrontation** ~ Confrontation between two characters has been building since the beginning of the story and it finally happens.

**Climax** ~ The most intense moment of the film; a very big grand moment full of importance, tension, and epiphanies.

**Resolution** ~ Ties up loose ends in the story. Who lives/dies, wins/loses, gets the girl/guy, returns with the treasure, celebrates after a quest, or has a big death scene in a tragedy.





## Plants and Robbers

**Scenario:** A big city cop gets transferred to a sleepy village and paired with an incompetent partner. With no more high profile cases to tackle, the cop now sees an even bigger threat than he ever faced: invasive hygrophila crowding out native plants due to dumping by the townsfolk. With his new partner in tow, the big city cop must now save the native plants using one of the following methods: (1) mechanical control (2) herbicide control (3) hand removal (known as physical control) and teach the people of this little town the dangers of invasive plants.

**For an extra challenge, use this “one liner” – *By the power of Greyskull!***

**Use at least three of these factoids in your video:**

1. Hygrophila is a submersed plant that was brought to the United States as an aquarium plant around 1945.
2. Hygrophila is a fast-growing and fast-spreading invasive plant that can out-shade and out-compete other submersed plants.
3. Hygrophila clogs irrigation and flood control canals and forms large mats that interfere with navigation.
4. Eel grass and baby’s tears are examples of native submersed plants in Florida. Hygrophila is so invasive that it can out-compete these native plants.
5. Hygrophila is difficult to control. Mechanical harvesters and chopping machines help remove hygrophila but these machines also fragment the plants which can help spread it to new areas. Like hydrilla, this plant can reproduce from a single fragment.
6. In its native country of India, researchers are looking for biological control agents such as insects that could eat hygrophila and keep it under control. Very few aquatic herbicides are effective against hygrophila.

**NOTES:**



## Story Scenarios



### A Lake Tale

**\*puppets recommended\***

**Scenario:** Some students accidentally get turned into lake animals (fish, turtles, aquatic insects, etc.) after drinking a mad scientist's potion. The kids end up in the lake, with one problem. Two types of invasive plants (hydrilla and water hyacinth) are keeping sunlight from reaching the bottom of the lake where native submersed plants (eel grass) are growing. These students turned resident animals, start having difficulty breathing after several days of cloudy weather. This is due to the hydrilla and the water hyacinth blocking the sunlight and causing less photosynthesis to occur in the lake. The resident animals devise a plan to save their habitat and at the same time save themselves from remaining animals forever.

**For an extra challenge, use this "one liner" –**

*Just when I thought I was out, they pull me back in.*

**Use at least three of these factoids in your video:**

1. Water hyacinth is one of the fastest growing plants known. If left alone, it can double the area it covers in as little as a week.
2. Hydrilla is an invasive plant that can fill up lakes and ponds from the bottom to the top. These dense mats slow down water movement and can prevent boating and swimming.
3. Hydrilla mats can form a cover over the surface of water bodies, like an umbrella, that will not allow light or oxygen into the water, killing native plants, fish and other wildlife.
4. Hydrilla is a submersed plant that was brought to Florida in the 1950s from Asia to grow in aquariums.
5. Large mats of water hyacinth can cause problems like damaging boats, providing places for mosquitoes to live, and covering up native plants that are good for fish and wildlife. These large mats can limit the transfer of oxygen into the water.
6. Some ducks and other water birds (especially American coots) like to eat hydrilla.
7. Hurricanes can actually help control hydrilla; in some parts of Florida, hurricane winds have blown so hard that they have been known to blow the plants right out of the lake.

**NOTES:**



## Story Scenarios



### Cypress Gardens Ski Parade

**Scenario:** They're back...and this time, they have sunscreen! The champion water ski team has decorated their skiers and their boat with invasive hydrilla for the Fourth of July boat parade. Unfortunately, they don't know that hydrilla is an invasive plant and they are about to spread tubers and fragments all over the lake. Two local students have figured out the problem but are having a tough time convincing the parade officials to stop the parade. Armed with only their wits and their knowledge of aquatic plants, they go rogue and race against time to save the lake.

**For an extra challenge, use this "one liner" – *We're gonna need a bigger boat!***

**Use at least three of these factoids in your video:**

1. Hydrilla is an invasive plant that can fill up lakes and ponds from the bottom to the top (surface). These dense mats slow down water movement and can prevent boating and swimming.
2. Hydrilla mats can form a cover over water bodies, like an umbrella, that will reduce light and oxygen into the water. If left unmanaged, it can result in fish kills.
3. Hydrilla is a submersed plant that was brought to Florida in the 1950s from Asia to grow in aquariums.
4. In Florida, hydrilla does not form seeds. Instead it forms buds on the roots called tubers that can lay dormant in the lake bottom for years before sprouting. Once hydrilla makes tubers, it is nearly impossible to eradicate.
5. The main way that hydrilla spreads is by small fragments of the plants breaking off and forming new plants. Boaters can unknowingly spread hydrilla when small pieces of the plant are transported on boat trailers and fishing equipment. Boaters are advised to remove plants from all boating equipment before they leave the water body.

**NOTES:**



## Story Scenarios



### Grassy Dilemma

**Scenario:** A new theme park is about to open and bring in millions of dollars to the local economy. A disgruntled employee of the park devises an evil plan to plant torpedograss all over the park and cause the grand opening to fail. An intrepid groundskeeper working for the park has to figure out a way to save the park from an infestation of this torpedograss while still keeping the guests happy. Suddenly everything changes as the groundskeeper meets some smart exchange students. With their help the groundskeeper builds up the nerve to stop the evil plan and save the day.

**For an extra challenge, use this “one liner” – *Do, or do not. There is no “try”.***

**Use at least three of these factoids in your video:**

1. Torpedograss is one of the most serious weed problems in Florida.
2. It is native to Africa and/or Asia and was introduced to the United States before 1876, primarily through seed used for forage crops.
3. Torpedograss grows in or near shallow waters where it can quickly displace native vegetation and it can also be found upland.
4. Torpedograss spreads by rhizomes which are underground root-like stems that send out leaves and shoots.
5. Herbicides can be effective in controlling torpedograss but it requires several applications. Mechanical control such as continuously tilling the soil can provide good control, especially when combined with herbicide applications.

**NOTES:**



## Story Scenarios



### Plant Court

**Scenario:** On location for the set of a traveling television courtroom show, the plaintiff is accusing the defendant of keeping an invasive plant garden off their boat dock. The plaintiff claims that the defendant was purposefully growing the plants (hydrilla, hygrophila or water lettuce) in order to block access to the lake. The defendant claims the plaintiff is making it all up and that there is no proof that these plants can cause any damage to native plants. Judge PK Weeds sets the record straight and orders both parties to work together to get the lake cleaned up.

**For an extra challenge, use this “one liner” – Does anybody have any jumper cables?!**

**Use at least three of these factoids in your video:**

1. Hygrophila is an invasive aquatic plant that has invaded rivers, streams and ditches in Florida.
2. Hydrilla and hygrophila are submersed plants that were brought to the United States as aquarium plants around 1940s and 1960s. *Definition: submersed plant- a plant that grows primarily below the water's surface.*
3. Hydrilla is an invasive plant that can form infestations that fill up lakes and ponds from top to bottom. These dense mats slow down water movement and can prevent boating and swimming.
4. Water lettuce is a floating plant that commonly forms large infestations which prevent boating, fishing, and other uses of lakes and rivers. *Definition: floating plant- a plant that is not rooted in the soil under the water. These plants are free-floating and get their nutrients directly from the water.*
5. Water lettuce mats greatly reduce biological diversity. These mats eliminate native submersed plants by blocking sunlight and altering plant communities.

**NOTES:**



## Story Scenarios



### Don't Let It Loose!

**Scenario:** The local aquarium and fish store owner usually dumps surplus plants and critters in the creek behind the shop. Kids that regularly visit the store see this and, having just learned about invasive plants and animals in school, have to convince the shopkeeper to stop by showing evidence of their harmful impact. Their work isn't done though, since now they have to show the shopkeeper how to report invasives (EDDMaps) and the proper way to dispose of invasive plants.

**For an extra challenge, use this “one liner” –** *The suspense is terrible... I hope it'll last.*

**Use at least three of these factoids in your video:**

1. The impacts of introducing non-native species- animal or plant- into a new ecosystem are often unknown and can turn out to be devastating. Preventing these introductions is critical to protect Florida's environment.
2. Never release unwanted pets into the natural environment. Doing so is unfair to the animal, is environmentally irresponsible and against the law.
3. Invasive aquatic plants can grow rapidly, blocking canals and other waterways. Once the plants are introduced, removing these plants is time consuming and expensive (costing many millions of dollars).
4. Introduced exotic fish could cause significant economic losses for the fishing industry.
5. It is recommended that when aquarium owners want to “dismantle” their aquarium... they should dump gravel, plants, snails, etc. into a bucket with a 10% bleach solution for at least 24 hours, then drain the water and dump the treated “decorations” into a trash bag and dispose in the garbage.
6. The exotic snakehead fish from Asia and Africa has been introduced into Florida waters. This is a predatory fish that is eating our native fish, turtles, frogs, and lizards.

**NOTES:**



## Story Scenarios



### Boggy Creek Invaders

\*puppets recommended\*

**Scenario:** The family just moved to their dream habitat. However, their real estate agent didn't tell them their bog was infested with the invasive weed hydrilla. The family didn't mind too much at first but then the scares quickly escalated. They began to notice other invasive plants entering their habitat. They decide to hold a bog meeting to explain why the invasive plants were so bad but the other animals ignored them. Will the community band together to fight the infestation or will the family have to leave their dream habitat? Or worse, will the invasive plants follow them wherever they go!?

**For an extra challenge, use this "one liner" –** *It is easy to propose impossible solutions.*

**Use at least three of these factoids in your video:**

1. Hydrilla is an invasive plant that can form infestations that fill up lakes and ponds from the bottom to the top. These dense mats slow down water movement and cause flooding. It and can also prevent boating, fishing and swimming.
2. Hydrilla mats can form a cover over water bodies, like an umbrella, that will reduce light and oxygen into the water. If left unmanaged, it can result in fish kills.
3. Hydrilla is a submersed plant that was brought to Florida in the 1950s from Asia to grow in aquariums.
4. In Florida, hydrilla does not form seeds. Instead, this plant forms buds on the roots called tubers that can lay dormant in the lake bottom for years before they sprout. Once hydrilla makes tubers, it is nearly impossible to eradicate.
5. The main way that hydrilla spreads is by small fragments of the plants breaking off and forming new plants. Boaters can unknowingly spread hydrilla when small pieces of the plant are transported on boat trailers and fishing equipment. Boaters are advised to remove plants from all boating equipment before they leave the water body.
6. On lakes that have major infestations of hydrilla, bass and other sport fish are smaller and weigh less.

**NOTES:**





## Speedy Hydrilla Removal

**Scenario:** The group is crowded around the boat and trailer like a NASCAR racing team. They frantically check the equipment while an inspector watches. A commentator announces what they are doing in the background: “Officials are inspecting these boats and trailers to ensure they are prepared for the next round in today’s bass fishing derby. This year’s event consists of three rounds of speed fishing in three of our seven beautiful lakes. All boats must pass inspection before moving on to the next round.” The air is electric as officials are seriously inspecting every inch of the trailer for invasive plants. Then it happens, one official spots a hydrilla fragment and announces “That’s a penalty!” Oh no! Is this the end or will the team make it to the last round?

**For an extra challenge, use this “one liner” – *This is no time to be thinking of strawberry jam!***

**Use at least three of these factoids in your video:**

1. Hydrilla is an invasive plant that can form infestations that fill up lakes and ponds. These dense mats slow down water movement and can prevent boating and swimming.
2. Hydrilla mats can form a cover over water bodies, like an umbrella, that will reduce light and oxygen into the water. If left unmanaged, it can result in fish kills.
3. Hydrilla is a submersed plant that was brought to Florida in the 1950s from Asia to grow in aquariums.
4. In Florida, hydrilla does not form seeds. Instead, this plant forms buds on the roots called tubers that can lay dormant in the lake bottom for years before they sprout. Once hydrilla makes tubers, it is nearly impossible to eradicate.
5. The main way that hydrilla spreads is by small fragments of the plants breaking off and forming new plants. Boaters can unknowingly spread hydrilla when small pieces of the plant are transported on boat trailers and fishing equipment. Boaters are advised to remove plants from all boating equipment before they leave the water body.
6. On lakes that have major infestations of hydrilla, bass and other sport fish are smaller and weigh less.

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## Story Scenarios



### Your Hometown News Channel

**Scenario:** You will be creating a public service announcement or news story about the impact of invasive plants on the local environment. Reporters can appear on location at the latest plant “attack” or speak to “experts” and “eye witnesses” regarding their views of the invasive plants. Information regarding the identification and disposal of these invasive plants should be provided to make the community feel safe and informed.

**For an extra challenge, use this “one liner” –** *The medium is the message.*

**Use at least three of these factoids in your video:**

1. Water hyacinth is one of the fastest growing plants known. Left alone, it can double the area it covers in as little as a week.
2. Water hyacinth is an exotic floating plant that is found in freshwater ponds, lakes and rivers.
3. Large mats of water hyacinth cause problems like stopping boats, providing places for mosquitoes to live, and covering up native plants that provide good habitat for fish and wildlife. These large mats can limit the transfer of oxygen into the water from the air above.
4. Water hyacinth greatly reduces biological diversity.
5. Water hyacinth is believed to have been introduced into the United States in 1884.
6. Water hyacinth can be controlled with aquatic herbicide or machines that harvest the plants and remove them from the water.

**NOTES:**



## Story Scenarios



### The New Kid Next Door

**Scenario:** A family has an aquarium with exotic fish and exotic plants. The kids are sick of feeding the fish and cleaning the aquarium so they plan to dump it into the pond behind the house. The new kid next door overhears their plan but is too scared to tell them that it is a bad idea. Decide how they can save the day and prevent the fish and plants from being introduced into the pond (and other Florida lakes and ponds).

**For an extra challenge, use this “one liner” – *It isn’t easy being green.***

**Use at least three of these factoids in your video:**

1. The impacts of introducing non-native species- animal or plant- into a new ecosystem are often unknown and can turn out to be devastating. Preventing these introductions is critical to protect Florida’s environment.
2. Never release unwanted pets into the natural environment. Doing so is unfair to the animal, is environmentally irresponsible and against the law.
3. Invasive aquatic plants can grow rapidly, blocking canals and other waterways. Once the plants are introduced, removing these plants is time consuming and expensive (costing many millions of dollars).
4. It is recommended that when aquarium owners want to “dismantle” their aquarium... they should dump gravel, plants, snails, etc. into a bucket with a 10% bleach solution for at least 24 hours, then drain the water and dump the treated “decorations” into a trash bag and dispose in the garbage.
5. The exotic snakehead fish from Asia and Africa has been introduced into Florida waters. This is a predatory fish that is eating our native fish, turtles, frogs, and lizards.

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