



## Problem-Solver Role Play Cards

Teacher should copy once and cut into individual cards.

<i>Problem-Solver Role Play Card</i>	<i>Problem-Solver Role Play Card</i>
<p style="text-align: center;"><b>Campers</b></p> <p>Many people enjoy camping in Michigan State Parks and other natural areas. Part of the fun can be telling stories or singing around a campfire. People bring their own firewood with them from one part of the State to another. They may not realize that they may accidentally bring invasive insects (like the emerald ash borer) or plant diseases with them. People can help by leaving their firewood at home and buying firewood close to where they are camping.</p>	<p style="text-align: center;"><b>Flower Gardeners</b></p> <p>Many people like to plant pretty flowers and other plants around their homes. Sometimes, people do not realize that some of the plants they put in their gardens may become weedy problems if not properly cared for. For example, common periwinkle is a pretty flower that may escape from gardens into shady areas and then crowd out native plants and young trees. People can help by not using invasive exotic weeds in their gardens. People can also make sure plants used in their gardens are native or at least non-invasive.</p>
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<p style="text-align: center;"><b>Boaters</b></p> <p>Many people enjoy using sailboats, motorboats, and fishing boats, but do not realize how easy it might be for them to accidentally transport unwelcome aquatic invasive species. Boats may have many places these unwanted hitchhikers can hide. To keep from spreading invasive species, boaters should remove plants, clean their boats and trailers, and drain any water before going to another waterway.</p>	<p style="text-align: center;"><b>Automobile and Bicycle Owners</b></p> <p>Invasive weeds and their seeds sometimes hitchhike from place to place by attaching to automobiles, bicycles, or off-road vehicles. For example, when people ride through a weed patch, plants may cling to the bottom of their car. People can help by staying on established roads and by removing any clinging weeds or seeds found in their tires.</p>



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<h2 style="text-align: center;">Cargo Ships</h2> <p>People depend on cargo ships to help transport goods from one port to another. For example, wheat grown in Minnesota may be put on a cargo ship and then shipped to France. Unfortunately, these ships sometimes carry unwanted hitchhikers as passengers in their ballast water. Ballast water is water that is carried by ships to help the ships balance and sit lower in the water. Ships either take on more water or dump out water as they unload or load cargo. Water emptied from ship ballast may contain unwanted invasive aquatic organisms. To help keep from accidentally carrying these unwanted passengers between ports, ships should exchange their ballast water in high seas (deep water) or take other precautions like filtering the ballast water or using heat to kill any organisms.</p>	<h2 style="text-align: center;">Aquarium Owners</h2> <p>Many people enjoy having aquarium pets, like fish, reptiles, snails, or other small animals. Sometimes, people do not realize that they can cause problems if they let these organisms go into the wild or by dumping aquarium water into bodies of water or down storm drains. Sometimes these organisms are able to survive. If they can reproduce, they may upset the balance of native species. Animals and plants that are not native to that area should not be released into the wild. People can help by not emptying the water, plants, or animals from aquariums into water of bodies or down storm drains. Instead, empty the water into the toilet or onto land far from bodies of water. When people can no longer care for animals and plants, the best thing to do is find another owner to take care of them. Otherwise, they should be destroyed in the most humane way possible.</p>
<i>Problem-Solver Role Play Card</i>	<i>Problem-Solver Role Play Card</i>
<h2 style="text-align: center;">Hikers</h2> <p>Many people enjoy walking in natural areas, such as through forests, fields, farmlands, and beaches. These people may be simply out for a walk or participating in other activities, like nature watching, berry picking, or hunting. In any case, people may not realize that as they walk, invasive plants (and their seeds) and other organisms may stick to their clothes or shoes and could be easily spread to another area. Hikers can help prevent spreading of these unwanted hitchhikers by walking on trails and by checking their shoes, socks, and pant cuffs for plant material and other organisms before and after hiking.</p>	<h2 style="text-align: center;">Anglers</h2> <p>Many people enjoy fishing, but do not realize how easy it might be for them to accidentally transport unwelcome aquatic invasive species. The equipment, clothing, and boat used to fish have many places these unwanted hitchhikers can hide. To keep from spreading invasive species, boaters and anglers should clean their boats and equipment, drain any water before going to another waterway, and not release live bait into any waters. Anglers, who have unwanted live bait (like minnows or worms) at the end of the day, should either give the bait to another angler for his or her use or dispose of it on land, where it will die.</p>



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<p style="text-align: center;"><b>Tourists</b></p> <p>Americans like to travel and visit new places. People may travel around Michigan, to other states, or even to other countries. People often do not realize that they might accidentally take unwelcome hitchhikers with them on their travels. To keep from transporting these unwanted organisms, they can keep their shoes, luggage, and belongings free of stowaway plants and insects. Also, people should be aware that it is usually against the law to bring fresh fruits and vegetables on airplanes to or from other countries.</p>	<p style="text-align: center;"><b>Dog Owners</b></p> <p>Many dog owners take their dogs on walks through fields or forests or to play in the water. Plants (and their seeds), larvae, and other organisms (like ticks) may stick to dog fur and could be harmful if transported to another area. To keep dogs from taking unwanted hitchhikers with them, dog owners should check the dog's body (including feet, coat, and collar) for any visible mud, plants, seeds, or animals and remove them. Dog owners can also help by keeping their dogs clean and well groomed.</p>

Source: Text for some of the above cards is adapted from the U.S. Fish and Wildlife Service-sponsored web site: <http://www.protectyourwaters.net> (Retrieved October 3, 2005).