



RECYCLE... WE HAVE AN ALTERNATIVE

OBJECTIVES:

- Become aware of problems of waste disposal
- Learn of ways to minimize waste disposal
- Understand problems of landfill disposal
- Learn ways individuals can help
- Promote awareness of waste disposal problem

GRADE/SKILL LEVEL:

Adaptable to grade 4 and beyond.

MATERIALS:

FOR DISCUSSION:

- Cape Cod community recycling program information
- SEMASS Waste to Energy facility program information
- Student reader series article
- Information on your own town's waste disposal options

ON SITE:

- Cape Cod community recycling program information
- SEMASS Waste to Energy facility program information
- Student reader series article
- Information on your own town's waste disposal options

ACTIVITIES:

Pre-visit:

- Discuss the issue of garbage disposal in your home town area.
- Discuss historic levels of solid waste production in the US (Native American levels, Colonial levels, current levels).
- Discuss disposal techniques that have been used (burying, burning etc.) ; evaluate the impact on the environment of non-biodegradable materials.
- Discuss problems of landfill limits, and potential negative side-effects of solid waste disposal (e.g. ground water contamination), especially for areas like Cape Cod.
- Discuss the benefits of recycling.
- Brainstorm ways to reduce the amounts of garbage generated.
- Brainstorm ways to reuse common waste items (juice lids, food scraps).

On Site:

For groups on single day visits to Cape Cod:

- Gather all glass, metal and aluminum containers and put into recycle bins.
- Gather all PETE and HDPE plastic containers and put into recycle bins.
- Put all other refuse products into regular garbage bins (but remember, these materials will eventually be sent to the SEMASS Waste to Energy plant, so they too will still serve a function in the larger Cape Cod recycling effort).

Note: Do not overfill trash containers, or leave trash in bags next to trash cans, as animals will find and scatter these materials at night.

For groups staying overnight on Cape Cod:

- Sort, rinse, bag and mark all deposit containers.
- Sort, rinse, bag and mark all non-deposit glass containers; carefully remove all metal or plastic attachments (paper labels OK to remain).
- Sort and rinse all non-refundable non-aluminum metal cans; remove tops and bottoms of cans; flatten cans.
- Sort, rinse, bag and mark all non-refundable aluminum cans, trays, foils etc; flatten items that can be done so safely.
- Separate out and rinse all recycable plastic products (PETE and HDPE -- look for code on bottom of items). Remove tops or accompanying rings; flatten all items that can be done so safely.
- Deposit recyclable materials into recycle containers. Put all other materials into regular garbage bins (but remember, these materials will eventually be sent to the SEMASS Waste to Energy plant, so they too will still serve a function in the larger Cape Cod recycling effort).

Post Visit:

- Review relationship of solid waste disposal with MarineDebris problems on Seashore beaches.



RECYCLING ... HAVE AN ALTERNATIVE

Student Information Sheet

People living on Cape Cod have recently realized that they need to dispose of their garbage in a way that does not hurt the environment. Fifty years ago, when less people lived on Cape Cod, garbage was taken to a town dump, where it was either burned, or buried.

Now that there are more people living on the Cape, it is possible garbage can become a serious problem. Burning garbage causes air pollution. And burying garbage can allow dangerous and unhealthy materials to seep into the "water table" located beneath the ground. Because all the drinking water that comes from Cape Cod wells needs to be as clean as possible, it is important to also keep the water table clean. In addition, as town dumps fill, there is often no space to build new landfill dumps on Cape Cod.

Cape Cod towns have agreed to participate in a special garbage transfer and recycling program. Most Cape Cod town dumps are now called "Solid Waste Recycling Transfer Stations." This means that solid garbage is now packed into special containers and then sent by truck or railroad to a "waste-to-energy" facility located off Cape in the town of Rochester. This material is then processed by a special "waste-to-energy" factory that burns the garbage and creates electricity and other useful by-products. To reduce the amount of garbage that needs to be "transferred" to Rochester, Cape Cod towns also have stepped up their own recycling programs. So now when you take your garbage to a town transfer station, special bins are provided to collect glass, certain plastics, paper, cans, bottles and other recyclable materials.

When visiting Cape Cod National Seashore, people can help by putting their cans and bottles into the recycle bins provided at many locations around the park. It is important to remember "reduce, reuse, and recycle" in order to help with the solution by not being a part of the problem.

RECYCLE STUDY SHEET

1 Burying garbage in dumps on Cape Cod can result in _____

2 Wells on Cape Cod get their drinking water from

3 _____

4 Cape Cod towns have turned their dumps into

5 Cape Cod towns also have set up recycle bins

6 When visiting Cape Cod National Seashore you can help by putting your recyclable cans and bottles _____