**Aaron Jackson**
**7th & 8th Grade Winning Essay**
**Owasso, OK**

# *How to Catch a Raindrop*

If one drives through an Oklahoma neighborhood on a hot summer evening, he or she is likely to see people standing in front of flowerbeds or gardens with hoses, watering plants and grass. Most of these gardeners probably hope it will rain so that water bills won't skyrocket just for the sake of keeping yards looking nice. However, one can't count on rainwater because he or she doesn't really know when or how much it will rain. That's why rain barrels can offer a simple solution as a method of catching rainwater for later use on plants.

Every time it rains, water runs off the drains and gutters on roofs of houses, and buildings. What doesn't soak into the ground travels along into ditches, streams, rivers and lakes, often eroding valuable topsoil along the way. A fraction of this water will be purified for reuse by people and the rest will either evaporate or end up in the ocean. As a result, one would be unable to use that fresh water and would instead use the water from the hose to water yards and gardens. If barrels were put under water spouts, these could catch rainwater, which is better for plants because it has no chlorine, fluoride, or other chemicals.

The rain barrel system would work as follows: gutters from buildings could hook directly into rain barrels, which would be secured tightly against bugs and animals with a tight lid. As the rain barrels fill, the pressure sends water into drip hoses, which would be attached to the bottom of the barrels, with a lever attached at the junction between the hose and barrel in order to control the amount of water allowed into the drip hoses at one time. The hoses themselves would be spread throughout flowerbeds and gardens, hidden by landscape fabric or mulch. If the garden spot were to far from the rain barrel to allow for a hose, a watering can could be filled from the barrel and carried to the desired spot.

More work, perhaps, but one might argue that it would pay off later. Using rain barrels is not a brand new idea. Farmers used a less sophisticated method long ago when extended droughts assured water shortages. The rain barrel became less popular when lakes made water more readily available. The rain barrel, however, is still a good tool for conserving water and could help today just as it helped farmers in the past. Rain barrels provide an old but proven way to conserve water. With a small investment spent on barrels and drip hoses, an Oklahoma gardener could save valuable resources in the long run and help keep beautiful yards in the process.