How homemade weed killer works

Because they do not want to use "chemical" weed killers, many homeowners use some variation of this recipe:

- 1 gallon vinegar
- 1 cup salt
- 1 T dish detergent

To be clear, each one of those three ingredients is considered a chemical. Vinegar is also known as 5% acetic acid or CH_3COOH; salt could be sodium chloride (NaCl) or other ionic salts such as KCl, CaCl, or MgCl, and dish detergent is usually a non-ionic surfactant (such as secondary alcohol ethoxylates). *It is not technically correct to say that "homemade weed killer" is "non-chemical weed killer". The ingredients are chemicals with common, familiar household names.*

The homemade weed killer works as follows:

- Vinegar: Acetic acid is a desiccant, meaning it draws water out of the plant. This kills the top growth of the plant, but not necessarily the roots.
- Salt: Salt also acts as a desiccant. Salt stays in the soil.
- Dish Detergent: The surfactants aid in wetting the plants, allowing the vinegar/salt solution to fully contact the leaves. This makes the solution more effective.

Be careful when using homemade weed killer. It is not selective; it will kill any vegetation that is sprayed. The salt stays in the soil and may prevent anything from growing. With heavy or repeated use near the lake, there is a risk of salt leaching into the lake and affecting the aquatic vegetation.

This homemade weed killer is best suited for occasional use on patios and driveways.