



To Tribal Families:

Household cleaning products can contain many chemicals, some that are known to be toxic, and many that are untested. The Natural Resources Department has received a grant from the Toxics Use Reduction Institute (TURI) at UMass Lowell to help reduce the use of toxic chemicals by Tribal members, to improve the health of Tribal families and reduce impact on the environment.



We are pleased to present to you a sample of commercially available 'greener' cleaner, and recipes for cleaning products you can make yourself with commonly available ingredients. These home-made natural cleaners are not only safer and less toxic than most store-bought brands, but are both less expensive and lab-tested to be as effective.

So make the switch to cleaner, greener, safer, and cheaper products. Or if you prefer to buy name-brand products, look for products that are safer and better for the environment. We'll show you how.



### What's in Conventional Cleaning Products?

Professional house cleaners have long noticed health issues from exposure to the common cleaning products they used:

headaches, respiratory irritation, dizziness, nausea, and worse. In 2006, house-cleaning workers in Boston came together to form a co-op to improve working conditions. As part of that, they investigated the toxicity of cleaning products, and discovered that conventional cleaning products can contain:

- **Ammonia:** a corrosive gas that can cause eye, nose, and throat irritation.
  - **Bleach:** is toxic in many ways, and when mixed with ammonia, soap, or organic matter, can create hazardous gases.
  - **Butyl Celosolve:** toxic to the kidneys, liver, and brain. May also cause reproductive problems.
  - **Formaldehyde:** a carcinogen that also causes eye, skin, and lung irritation and headaches.
  - **Hydrofluoric Acid:** toxic if inhaled, and burns the skin.
  - **Hydrochloric and Phosphoric Acids:** corrosive, and can cause liver and nervous system problems.
  - **Sulfuric Acid:** a carcinogen; can also burn skin and eyes.
- Other chemicals common in cleaning products, like **VOCs, phthalates, and fragrances**, can have a variety of effects on health and the environment.

### What is a "Green" Cleaning Product?

Many companies offer "green" or "environmentally friendly" cleaning products in your local supermarket, and while these are likely to be preferable to conventional cleaners, some may still have toxic chemicals. As a consumer, read the labels, and try to buy products that are labeled "non-toxic" and "biodegradable"; these will be better for you and the environment. Avoid labels with dire warnings like "DANGER" or "POISON".



Products labeled with the "Green Seal" label have passed stringent environmental tests; Green Seal is a non-profit organization that sets strict environmental standards for many products.

In addition to Green Seal, the U.S. EPA's Design for the Environment (DfE) program also certifies environmentally sound cleaning products.



The Tribe uses eco-friendly cleaning products from EcoMV, an Island supplier that specializes in environmentally and socially responsible products. Included in this mailing are samples of several of the products available through EcoMV.



## Make Your Own Green Cleaning Products

After discovering all of the chemicals in commercial cleaners that were making them sick, the house-cleaning co-op in Boston began experimenting with safer formulations, and discovered that they could make their own cleaning products cheaper than they could buy the ones that were causing their health issues. And while the cleaners knew the products worked better, the TURI lab at UMass Lowell tested all the recipes and found they worked as well or better than the commercial products they replaced, and also met Green Seal standards, meaning they a) are highly biodegradable, b) do not damage aquatic life, and c) are effective at cleaning.

The recipes they came up with are presented below:

### FANTASTIC - All-purpose cleaner.

In a spray bottle, mix:

- 16 ounces water
- 2 ounces castile soap
- 2 teaspoon vinegar
- 1 teaspoon borax
- teaspoon baking soda

### AMAZING - Glass cleaner.

In a spray bottle, mix:

- 16 ounces water
- 8 ounces vinegar
- 20 drops essential oil

### TERRIFIC - Furniture polish

- 6 ounces light oil
- 2 ounces vinegar
- 40 drops essential oil

### FABULOUS - Floor cleaner

- 20 ounces water
- 4 ounces vinegar
- 20 drops essential oil

### MAGIC - Antiseptic soap

- 20 ounces water
- 3 teaspoons castile soap
- 30 drops tea tree oil

### DUST-AWAY - Furniture and floor polish

- 16 ounces water
- 2 ounces vinegar
- 1 teaspoon light oil
- 20 drops essential oil

The ingredients:

- Water: distilled water is best, but tap water will do.
- Castile soap: a gentle soap made from vegetable oils rather than animal fats or petroleum. Dr. Bronner's is a popular brand.
- Baking soda: inexpensive and safe deodorizer and scrubber.
- Borax: a naturally occurring mineral used for 4,000 years to clean, and to kill mold and pests.
- Essential oil: Essential oils come in a variety of fragrances and add scent to the formulations. Any essential oil can be used, except where a specific oil is suggested.
- Grapeseed oil: An edible oil with properties helpful in polishing and dusting.
- Tea tree oil: An essential oil with antibacterial properties useful in soap.
- Vinegar: use the commonly available white vinegar with 5% acidity.



# Wampanoag Greening Cleaning Project

