



# LAND STEWARDSHIP PROJECT



## LSP's Soil Your Undies 2017 Campaign!

This is a hilarious, do it yourself test for soil microbial activity started by the Innovative Farmers Association of Ontario, Canada. To compare the soil biology between test strips, between fields, or across farms, all you need are a few pairs of white 100% cotton briefs. Bury the underwear in the top 6 inches of topsoil for 6 weeks and then compare the levels of decomposition between undies. If that underwear looks like a G-string after 6 weeks, you have healthy soil, because the biological activity indicates higher levels of organic matter. These same micro-organisms can break down crop residue in much the same way and reduce or even eliminate the need for tillage.

### What you'll need:

- New, 100% cotton briefs (no dyes, boxers, or polyester blends)
- Shovel
- Flags

Dig a small trench and bury the underwear in the top 6 inches of the soil. Leave the waistband showing a little and mark the place with a flag so you'll be able to find it back again. Leave the underwear buried for 6 weeks. Dig it up carefully and wash it in a bucket of water to remove the soil.

### To make a good comparison:

- ◇ Test similar soil types under different rotations and field histories
- ◇ Keep track of each pair by writing an identifying number on the waistband
- ◇ Be sure to bury all underwear being compared on the same day, and for same amount of time
- ◇ If you have a sensitive scale, you can weigh the undies prior to burying and after to determine the amount of decomposition.
- ◇ Make sure the undies are dried out completely after being buried
- ◇ Send photos and descriptions of your results to Shona Snater at [ssnater@landstewardshipproject.org](mailto:ssnater@landstewardshipproject.org) or Tweet us [@LSPnow](https://twitter.com/LSPnow) with #SoilYourUndies



**Get your undies before October 20, 2017**

**[Purchase your "Soil Your Undies" kit at our online store by clicking here!](#)**  
**OR purchase a kit at the office for \$5 at 180 E Main St. Lewiston, MN 55952**  
**OR receive a kit by mail; send your contact information along with \$10 to**  
**Land Stewardship Project PO Box 130 Lewiston, MN 55952**  
**Or call us at 507-523-3366**



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LSP believes in fostering an ethic of stewardship for farmland, promoting sustainable agriculture and developing healthy communities.

## Resources to Help You “Soil Your Undies”



2013 Canadian Nuffield Agriculture Scholar, Blake Vince, demonstrates in this 2.5 minute video how to measure Soil Biology by burying cotton underwear. To watch the video, visit: <https://www.youtube.com/watch?v=Ym0naUloQmY>

There are more living organisms in one tablespoon of soil than there are humans living on the earth. We’ve all heard this, but how do we know? How can we visualize this? Maybe we could give them an underwear sized plate of food and see how much they can eat in 6 weeks. Also, we know that not all soils are created equal, so let’s try a few different soil management systems and see what happens. This was the hypothesis when Neil Sass of the Waverly Soil Survey Office, buried 6 pairs of Fruit of the Loom 100% cotton “tighty-whites” on September 26th, 2015 in Northeast Iowa . Here are the results:

Management Practice	Begin wt. (g)	End wt. (g)	% Decomposed
Permanent pasture	54.6	36.6	33.0%
No-till soybean w/rye cover crop	54.9	41.5	24.4%
Alfalfa	55	30.2	45.1%
No-till corn	unable to locate after 6 weeks		
Conventional till corn	55.6	55.3	0.5%
No-till soybean	57	44.4	22.1%

### The Five Soil Health Principles to achieving the “ultimate G-String”:

1. Use plant diversity to increase diversity in the soil
2. Minimize disturbance, such as tillage
3. Keep plants growing throughout the year to feed the soil
4. Keep the soil covered as much as possible
5. Incorporate livestock