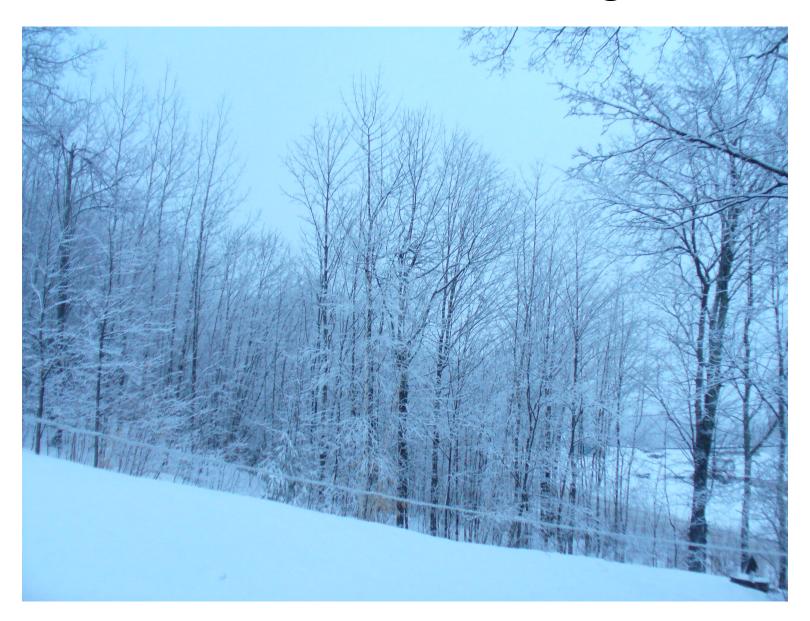
SURVIVOR: FARMINGTON

A Post-Apocalyptic Game of Survival for use in courses related to Sustainability

Dr. Peter Hardy
Associate Professor of Mathematics
University of Maine - Farmington

Winter is Coming



State of Emergency

It is February of 2019. Two weeks ago a coordinated series of terrorist attacks has severely disrupted the flow of oil through the worldwide market causing widespread chaos. The United States government has declared a state of emergency for the entire country.

Gasoline is being rationed and when it is available the prices are exorbitant. Local stores have not seen any deliveries for a week and barely half of them remain open for business. A blackout of the entire region began three days ago and there has been no word as to when electric service will be restored. The university has closed its doors and told its students to go home.

The Gathering

The students from HON177 – Sink or Swim: Building a Sustainable World have gathered at their professor's house in Farmington, Maine to wait out the storm.

THE TEAMS

THE DAMN BEAVERS

H400K ST, 50S



THE WU-TANG CLAN



Maslow's Hierarchy of Needs



Esteem

Love/Belonging

Safety

Physiological

moral, creative, spontaneous

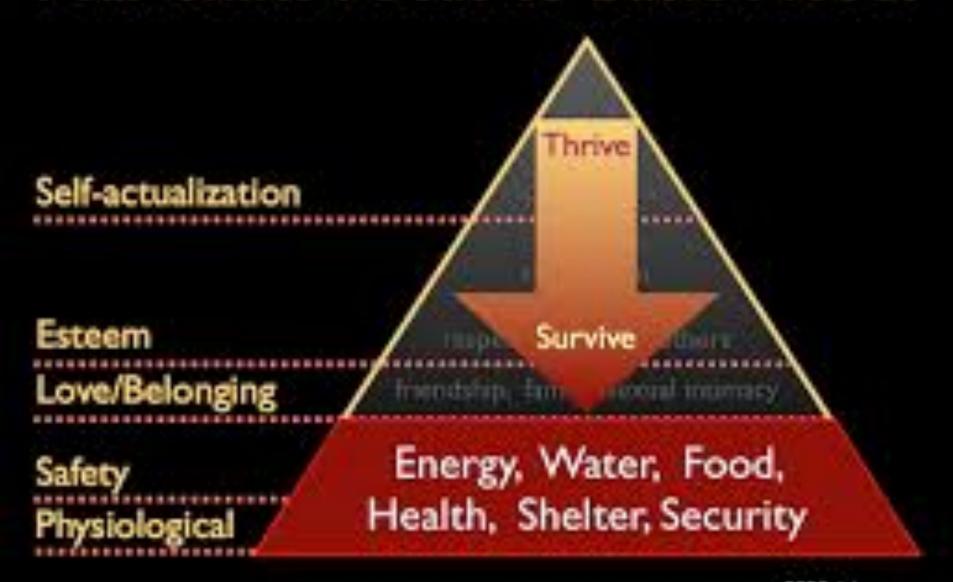
confidence,
self-esteem,
achievement,
respect by and for others

friendship, family, sexual intimacy

security of body, of family, of employment, of health, of shelter

breathing, food, homeostasis, water, sex, sleep

Fear Shifts Focus to Basic Needs



THE SUBGROUPS

THE DAMN BEAVERS

THE WU-TANG CLAN

WATER – Aqua Knots

WATER – H2O, Too

FOOD – Top Chefs

FOOD – Pinky and the Brain

SHELTER – S.A.C.S., Inc.

SHELTER - Bali Tribe

HEAT/ENERGY – Dante's Inferno

HEAT/ENERGY - The Pyros

HEALTH/1st AID – Red Cross

HEALTH/1STAID – Typhoid Marys

SECURITY – Alpha Omega

SECURITY - Thunder Clan

The Assignment

 How could you foster long-term sustainability on such a commune?

 5-page paper and 10-minute presentation to the class outlining each subgroup's plan for providing for the commune from within their own area of expertise

THE GAME

The Trip to Wal-Mart

You must decide how many people to send to Wal-Mart. The more people you send, the better chance you have of getting back to the commune with your goods. But there is a small chance that anyone sent might not return as follows:

- Percentage of goods you will bring back =
 100(1 1/2n) % , n = number of people sent
- Probability that any individual may not return to the commune = 10 %
- How many people will you send?

Divine Intervention(?): THE DAMN BEAVERS

Twenty 50-lb. bags of dry dog food



Partners in Trade

A well-to-do commune has approached you with a proposition for an exclusive trade agreement between your two communities.

What do you have to offer them?

You will have 5 minutes to convince them to trade with your commune.

Who will survive the winter of 2019?

HON177 – Spring 2019

WATER -

FOOD -

ENERGY/SHELTER -

HEALTH/1st AID -

SECURITY -

JaCK F.L. GraPeS

WATER -

FOOD -

ENERGY/SHELTER –

HEALTH/1st AID -

Rainbow Farm









Advantages

Only 10 Commune Members

 They have an electrician who can disconnect the solar system from the grid

New heat pumps for hot air and water

Disadvantages

Long and cold winter

Less than ½ cord of stored firewood

Less than two weeks of stored food

No chickens or meat animals

Results of Wal-Mart Looting

Only the Heat/Energy group decided to join in the general looting and made away with 5 times the loot of the other groups, however...

One woman broke her arm in the mayhem!

Results of Local Scavenging

Emboldened by the Heat/Energy group's lack of discretion, most of the groups chose to try to overwhelm and forcibly remove the resources of the houses that were not empty and everyone came away with something:

The Loot

WATER -

Wal-Mart: drinking water germicidal tablets, Aqua-tamer (7 gal.), water bottles, solar shower, 12-quart stock pot, indoor-play natural sand, Aquatech activated charcoal (\$99.56)

Scavenging: 4 unoccupied houses (5,8,11,20)

3 sleds, water purification tablets, Brita water filter, 2 ice picks, a 2000W gas-powered generator, a 50-gallon metal trough, 10 bales of hay and a gaunt horse

FOOD -

<u>Wal-Mart:</u> 20 rounds of .243 bullets, mixed frozen vegetables (x17), frozen strawberries, fishing line and hooks, $100' - \frac{1}{2}$ " rope (\$99.40)

Scavenging: 1 unoccupied house (12)

4 pumpkins, 18 cans of assorted vegetables, meat and fish, a spice rack full of various spices, baking necessities, 2 boxes of spaghetti

HEALTH/SAFETY –

Wal-Mart: Brita water bottle, knee brace, magnesium lotion, wrist brace, 24 gauze rolls, hot/cold pack (x2), 50 face masks (x2), 100 rubber gloves and a bandana (\$100.20 – **BUST**)

Scavenging: visited 4 houses, 3 occupied – ran from 1 and overwhelmed the occupants of the other two to take their stuff (7, 20, 1)

5 pillows, 2 garbage bags full of clothing and sheets, 2 first aid kits, a sewing kit, assorted bottles of vitamins and medicines, cotton balls, a garbage bag half-full of toilet paper, Vaseline, a pair of crutches and a box of pads

ENERGY/SHELTER –

Wal-Mart: soldering kit, tarp, gas can, box of #1 3" screws, 1 axe and an inverter (\$99.86)

They joined in the general looting and also came home with assorted rope and electric wire, a blowtorch and a **bonus** item of 10 tiki torches with fuel **BUT** Grace now has a **broken arm**

Scavenging: 2 unoccupied houses (14,14) and 1 occupied house in which the inhabitants were overwhelmed and loot taken (8)

2 axes, 3 shovels, insulation, 300' of copper pipes, a shoebox full of assorted batteries, 1 Li ion battery for the solar array

SECURITY -

Wal-Mart: 20 rounds of .243 bullets (x2), 150' – 4' roll of chicken wire, 2-pack of long lighters and a box of matches (\$99.54)

Scavenging: 3 occupied houses - the occupants of the first were subdued (7), **BUT** Kenzie was **shot in the thigh** at the second and they ran/hobbled away from the third

2 axes, solar outdoor lights, a whetstone, 12 metal fence posts, 2 battery powered lanterns

CONSEQUENCES:

One gunshot wound and one broken arm

Angry Neighbors

Bar Karma Level: HIGH

The Ovine Flu

One member succumbed to the Ovine Flu

Three more members contracted the flu and are convalescing in the makeshift infirmary

And the winter drags on...

So What's the Point?

It's Fun!!!

Pedagogically....

- It makes the students think about the essential resources needed to a prolong human life
- It makes them confront the fact that the whole fragile house of cards might come crashing down at any moment and they would then be responsible for providing these resources
- It inspires them (hopefully) to do something about our environmental challenges so as to prevent or mitigate the worst of the effects just such a collapse would wreak upon humanity

It's Fun!!!