















## Milkweed - More than just a Weed!









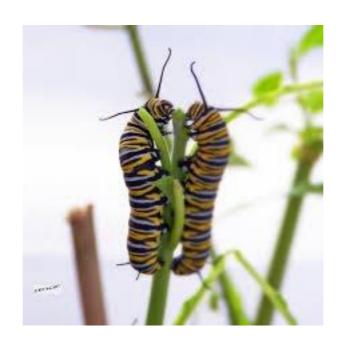






Is because Heather Darby asked me what I thought about growing Milkweed







# The Milkweed plant is the sole food source for the Monarch caterpillar







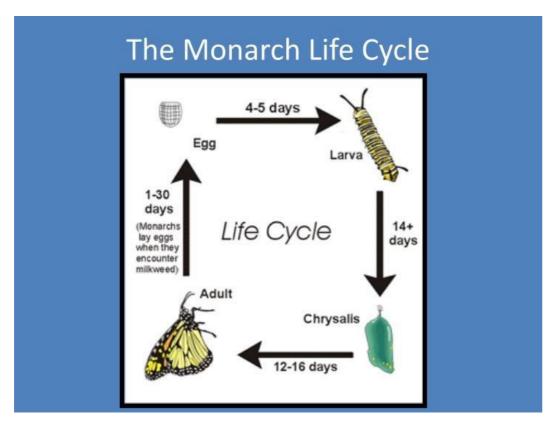
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Bees love the flowers







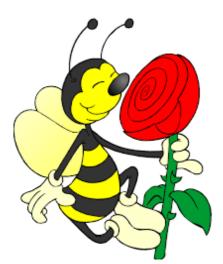












Ever smell Milkweed when its in flower?

Ever try honey made from Milkweed?











































Despite its poor reputation as a weed, the common milkweed played a vital role locally and throughout the nation during World War II when it became a strategic resource gathered by school children.

## Replacement Kapok





Members of the Field and Farm 4-H Club of Glastonbury, Connecticut, who collected 240 bags of milkweed pods.

NOW BUYING

### RIPE MILKWEED PODS

15c Per Sack

SPECIAL OPEN MESH 50 LB. ONION SACKS FILLED TO MAXIMUM CAPACITY. Sacks Distributed — Information Given — Pods Purchased at following Buying Stations in this area.

Wm. Metzger GAYLORD

Ira House

SPARR

Stanley Cherry ELMIRA

Darrell Fleming HALLOCK

Vern Welch JOHANNESBURG

Claude Wilson VANDERBILT

PICK PODS • BUY WAR BONDS

War Hemp Industries, Inc. - Milkweed Floss Division - Petoskey, Michigan

#### How Did Young Americans Support War Effort in WWII?



Boy Scouts collect milkweed pods for lifejacket stuffing

### WANTED

### 15,000,000 Lbs. Ripe Milkweed Pods

FOR USE IN THE WAR EFFORT

Government needs Milkweed Floss as a replacement for Kapok in the making of Life Preservers, Aviators Jackets and other military pur-

Harvesting to start about September 25 or as soon as pods are ripe, Seeds in pods must be brown.

15c per bag for fresh pods - 20c per bag for dry pods delivered to buying station nearest you.

#### EMMET COUNTY BUYING STATIONS

Petoskey-Emmet County Fair Grounds

Epsilon-Henry Maxwell, Petoskey, R-2

Curtis School Area-Walter Turman, Petoskey R-2

Alanson-Fairbairn & Sons Brutus-John Steen Pellston-Calvin Gillett

Levering-Chester LaTocha Store

Pellston RFD-William LaTocha, Larks Lake

Bliss-Frank LaTocha Store Cross Village-Marsek Store Good Hart-Dale Lamkin Stutsmanville-Ralph Radle

Harbor Springs-Philips Service . Station (Maurice Philips)

Bay Shore-Jack Hinkley

### Pick Milkweed Pods for Victory--for Profit

War Hemp Industries, Inc., Milkweed Floss Division, Petoskey, Mich.



There are 127 producers in the Coop With 2000 acres in production in Quebec





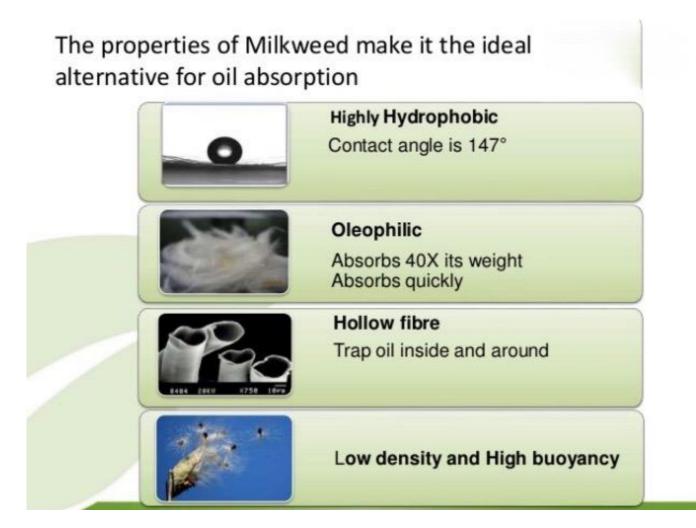




The special properties of the fiber make it an advantageous and ecological substitute for different applications: vegetable silk, oil absorbent, thermal and acoustic insulation.



Three stages of Milkweed pod processing





Coop supplies milkweed to fill contract with Parks Canada to supply national parks with oil-spill kits

### 1kg of milkweed fibers absorbs 50 liters of oil

(ASTM F716 with 0,78 density oil)





5 X more absorbent than synthetic polypropylene alternative

00000x4

#### 7 milkweed plants to clean a one gallon oil spill

Spill volume (gallons)	10000
Qty of fiber required (lbs)	1667
Equivalent plantation surface (acres)	3,6
Number of plants	75000

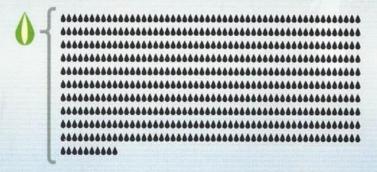
## HydroNature

#### HOW CAN A PRODUCT THAT CLEANS UP OIL SPILLS ALSO HELP MONARCHS

Thousands of acres of milkweed are seeded to produce oil absorbents.

Monarch butterflies depend on milkweed for reproduction.

### 1 acre of milkweed = 500 ten gal spill kits



The field's locations are dispersed across areas where milkweed already grows naturally.

No insecticide used for this crop as we rely on natural pollinators for pod production.

After the monarchs have left for the south, harvest occurs — and the habitat is ready for the next migration.

A truly sustainable industrial activity to help protect monarch's breeding grounds AND its reproduction.

#### **ABOUT MILKWEED**

Asclepias syriaca, the common milkweed, grows naturally in Canada, USA and Mexico.

The asclepias family is especially important for ecology because their flowers supply nectar to bees and a variety of desirable pollinators. The flowers are fragrant and beautiful — and they attract tourists and school children, too!

Milkweed leaves are a unique feeding source for the monarch butterfly larvae.

Seeded only once per 10 years, this perennial crop promotes soil quality through no-till cultivation and a deep root system.

Grows productively on marginal lands less suitable for food crops.

Requires no artificial fertilizer ----

The fiber's unique properties produce a remarkable carbon-neutral substitute for conventional oil absorbent used to clean up spills.





### Processing Milkweed fibers



Rather than using it as a down-style loose fill, **Fiber Monark** in Canada has been weaving it into a Thinsulate sheet.





### (Testing Milkweed Insulation)

Jean-François Tardif, a mountain climbing lover, climbed Everest equipped with milkweed-insulated clothing. He even said he was too hot for the temperatures in which he was climbing (-22 degrees to +25 degrees in the sun).





Milkweed was next tested by the Canadian Coast Guard working on icebreakers. Since this fibre is very warm and water-repellent, it proved to be a perfect candidate to test in the environment they were in.

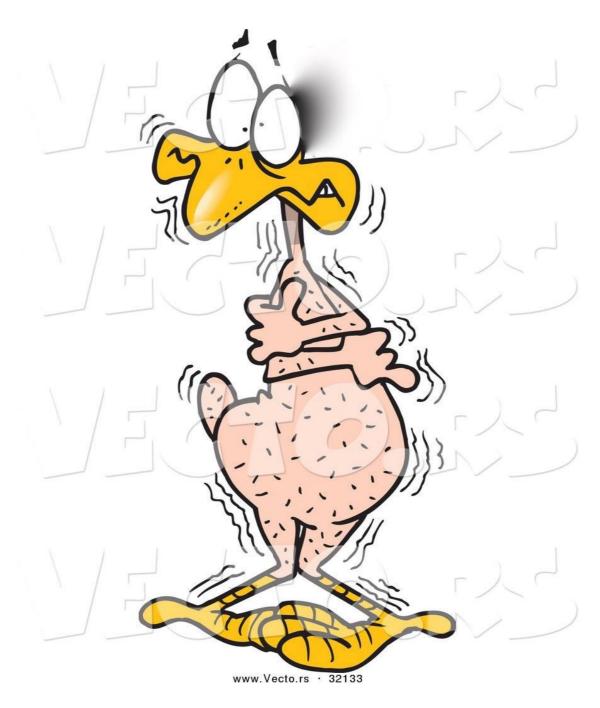


Altitude Sports, Quartz Co. and MonarkTM present the Milkweed Collection.

A local creation. Plant-based insulation. Worldwide exclusivity.

Made in Canada.

Demand was way greater than supply



No Geese were harmed in the making of these products



June 18, 2015 - I tilled and seeded 7 acres to milkweed using an air seeder to see how it would do.



Wait I think I see one !!!



Milkweed sprouts late and is hard to find and it doesn't like competition



August 2, 2015



May 25, 2016



July 26, 2017



On June 15, 2016, we used no-till seeding of Milkweed on five acres of sod and 40 acres of corn ground.



July 2016 Competition problems - everything but Milkweed



Till same field November 2016. This time we used an air seeder.

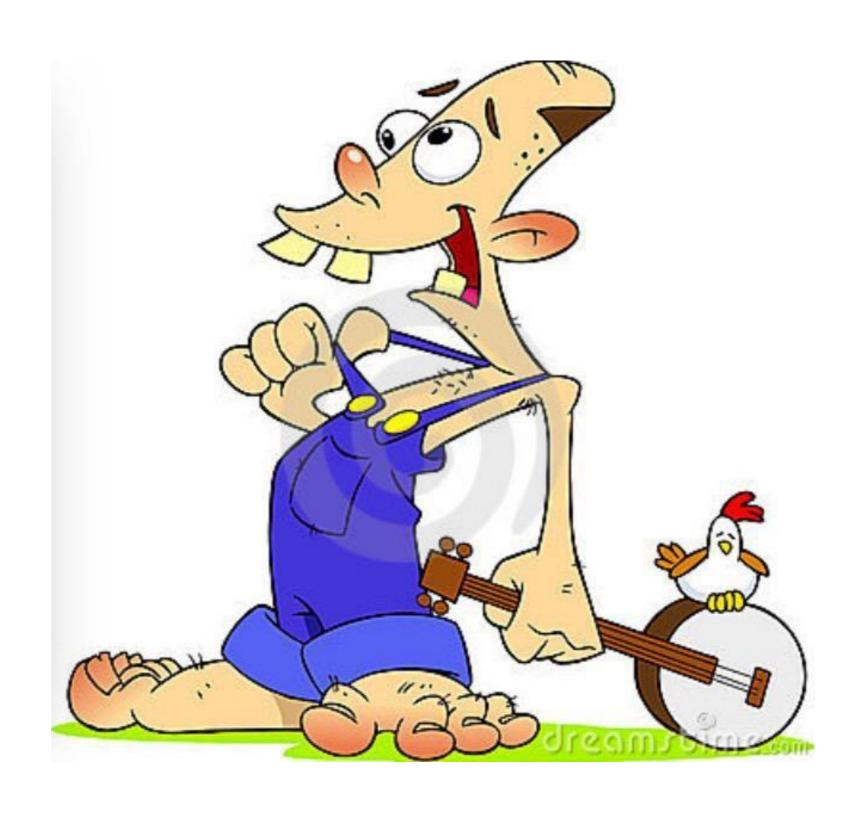
### Milkweed Field 2017



June 2017 No-till seeded June 2016



September 2017



**Milkweed Farmer** 







Custom Milkweed harvester



You think Grandpa knows what he's talking about?