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# **WINTER SEED SOWING: WHY AND HOW**

**NEWTON FREE LIBRARY**

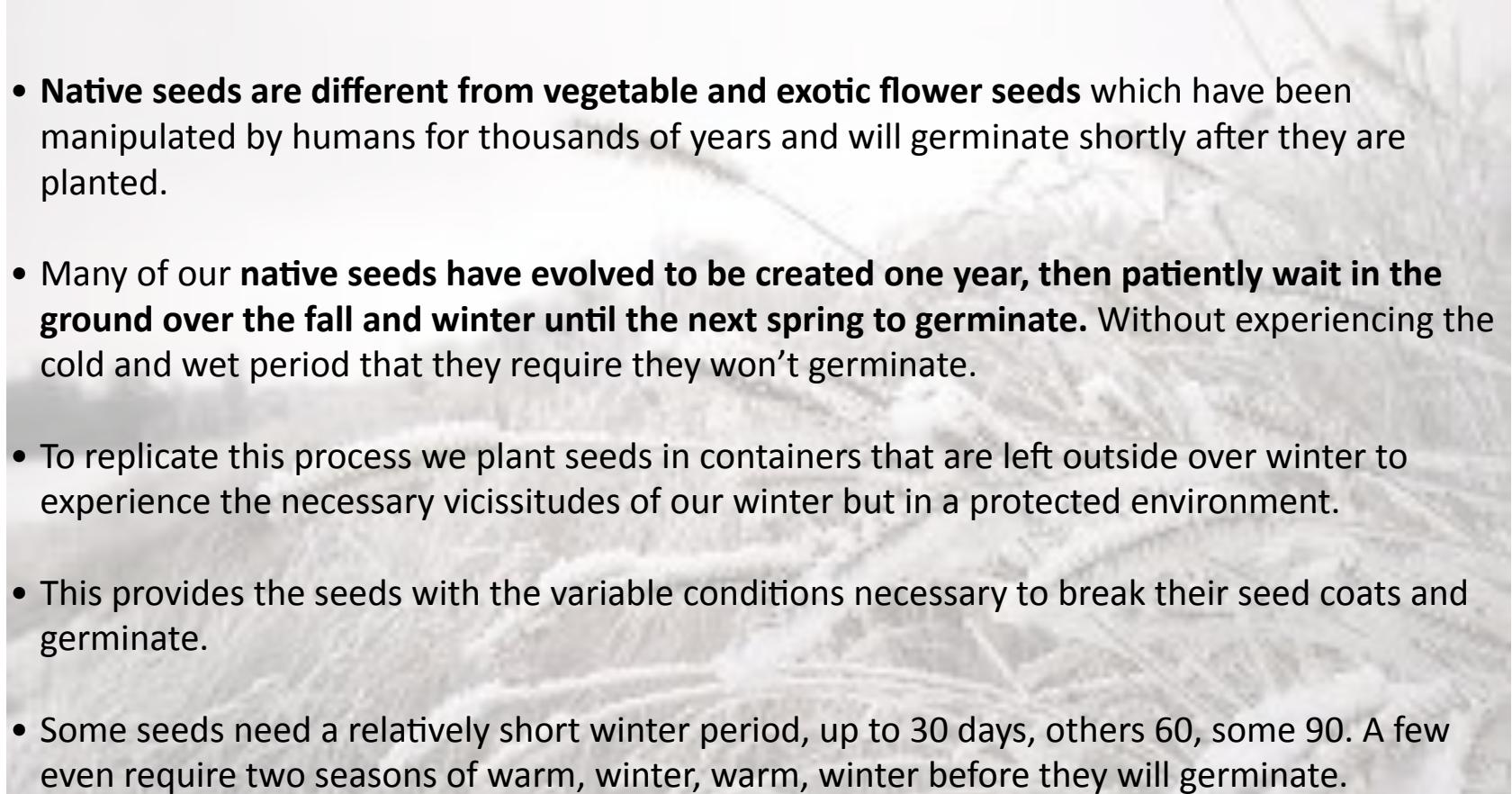
**JANUARY 10, 2026**

**NEWTON COMMUNITY POLLINATOR PROJECT**



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# WHAT IS NATIVE PLANT WINTER SEED SOWING?



- Native seeds are different from vegetable and exotic flower seeds which have been manipulated by humans for thousands of years and will germinate shortly after they are planted.
- Many of our native seeds have evolved to be created one year, then patiently wait in the ground over the fall and winter until the next spring to germinate. Without experiencing the cold and wet period that they require they won't germinate.
- To replicate this process we plant seeds in containers that are left outside over winter to experience the necessary vicissitudes of our winter but in a protected environment.
- This provides the seeds with the variable conditions necessary to break their seed coats and germinate.
- Some seeds need a relatively short winter period, up to 30 days, others 60, some 90. A few even require two seasons of warm, winter, warm, winter before they will germinate.

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# WHY WINTER SOW PLANTS IN POTS VS SEEDS

## Buy Plants in Pots

### PROS:

- High likelihood of success
- Mature plants
- Immediate results

### CONS:

- \$\$\$
- Selection

## Grow from Seed

### PROS:

- Extensive selection
- Low cost/free
- Engaging!

### CONS:

- Uncertainty
- Time

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# WHY WINTER SOW POTS/JUGS VS DIRECTLY SOW IN SOIL

Much better germination rate

## In the Wild:

Germination success rate might be 1 out of 100

- Washed away by rain
- Buried too deeply (not enough light)
- Buried too shallow (seed coat doesn't stay moist)
- Eaten by birds or critters
- Not enough moisture
- Inconsistent moisture
- Other

## In a Protected Container:

A gardener can have close to 100% germination

Why?

- Control the above variables.



# LOTS OF DIFFERENT WINTER SOW METHODS

- 1 gal milk/water jugs
- Plastic freezer bags
- Any 4" deep pot with screen or cover
- Other containers

The method we are using today is 1 gallon milk/water jug

It provides a safe and sheltered environment that:

- protects from critter
- keeps soil and seeds moist



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# TOOLS (WILL DISCUSS, NOT TO SCALE)



Translucent  
milk jug  
to plant in



Tool to put  
drainage holes  
in jug bottom



Tool to cut  
open jug



Seeds  
for planting



Plastic strips  
to label plants



Duct tape to  
re-seal jug



Organic  
potting soil  
for planting



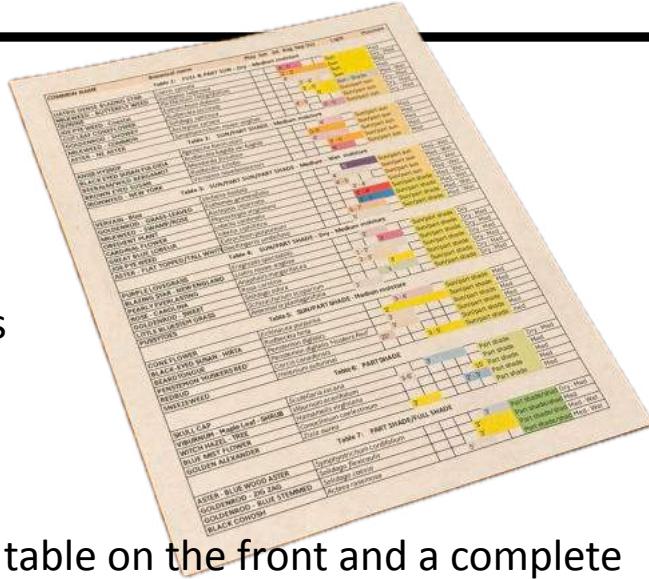
Gentle Waterer  
to water seeds  
Water-holding bottle  
with holes drilled  
in lid with 5/64" bit



Garden Marker  
or wax pencil  
to label plants

# HOW TO SELECT SEEDS

- The rooms is set up with 7 sowing tables
- Seed are arranged by light and moisture conditions
- Table 1 - Full and part sun — dry - med moisture
- Table 2 - Sun/Part Shade, Medium moisture,.. etc.
- Each table has a placard with a list of seeds at that table on the front and a complete list of all seeds on the back
- Each table also has a QR code that you can use to look up what all the plants look like, and it will also be on the screen during Q&A
- Everyone was asked to bring at least 1 jug, and we have enough soil and extra jugs for everyone to sow 2 additional jugs
- For each jug you sow you can move to a different sowing table
- We have some cardboard cartons available to make it easier to carry your jugs home.



# WINTER SEED SOWING PROCESS

## STEP 1 - CONTAINER PREP

Moisten soil

- If you're planting a bunch of pots do this first — Pour soil into a bucket, add water so that when you squeeze a handful the soil stays clumped together but no water drips out between your fingers
- If you are planting only a couple jugs you can add water after you put the soil in the jug

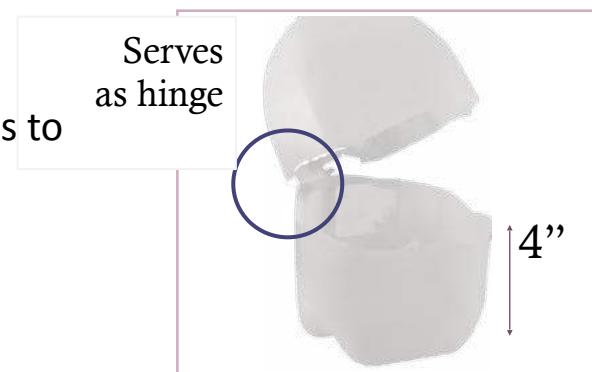


**CRITICAL** - Drill 8–12 1/4" holes in jug bottom and edge

Cut jug almost in half, leaving hinge at bottom of handle- helps to draw a line around jug where you want to cut

Fill jug with soil to  $\frac{1}{2}$ " of top – shake lightly to settle soil

If you did not moisten soil as above, this is where you add 1-2 cups of water per gallon jug



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# WINTER SEED SOWING PROCESS

## STEP 2 - SOWING

**HOW MANY SEEDS PER JUG?** -- Not many.

- Large seeds like milkweed – 9-12
- Medium seeds – maybe 1 per inch or more between seeds
- Tiny seeds – Just a tiny pinch sprinkled lightly – can mix with sand to help distribute.

**DEPTH**

- Seeds should be sown as deeply as the width of the seed.
- Tiny seeds should not be covered with soil, they need light to germinate



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# WINTER SEED SOWING PROCESS

## STEP 3 - WATER, LABEL, CLOSE

### WATER

Sprinkle planted seeds with ~ 1/4 cup water to moisten seeds

### LABEL

Write the name of the seeds and date on a plant marker and place **inside** jug

### Tape jug closed

Write name of seed and date on top and/or bottom side of jug

Write attendee name on jug too



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# JANUARY - MARCH CARE OF JUGS

- Place jug outside uncovered
  - seeds need to experience snow, rain, cold...
- Lift jug periodically – if feels light,  
add water through top opening
- Keep in part-shade/shade until seeds start to sprout
- Open jugs on warm ( $\geq 60^{\circ}\text{F}$ ) days; reseal for cold ( $\leq 32^{\circ}\text{F}$ ) nights
  - Leave open once nights stay above freezing; keep soil moist
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# APRIL - JUNE

## CARE OF SEEDLINGS

- Most seedlings will sprout end of March/April
- Different seeds will germinate, sprout and grow at different times and at different rates
- Seedlings are most vulnerable just as they begin to germinate
- Make sure containers stay somewhat moist. Lift them up, if they are light they may need water
- If they are in sun you may need to open jugs during the day to prevent overheating, use your judgement. Maybe move to shaded area.
- If the weather gets cold after they sprout that should not be a problem if they are enclosed jugs.



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# TRANSPLANTING

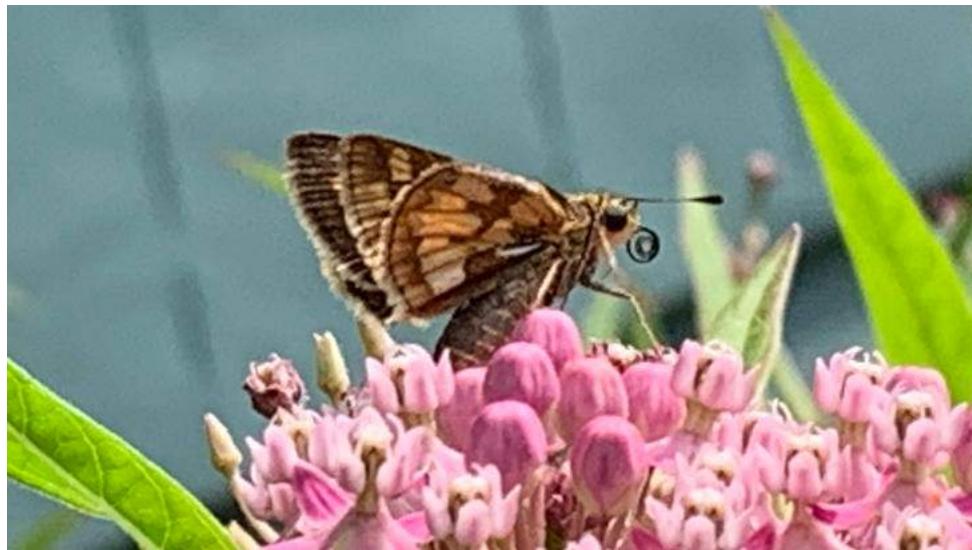
- Transplant in early June or September.
- Two true leaves and about 2-3" tall, depending on plant variety.
- Into larger individual pots or into soil.
- If you leave in pot or transplant to a larger pot you will need to add fertilizer at some point.



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## ONCE TRANSPLANTED

- Protect from rabbits - Coated chicken wire fencing works well
- Water regularly until established
- Many native perennials only form a rosette the first year and will not bloom until the second year. “First they sleep, then they creep, then they leap”



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# Q & A

Images of plant seeds



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ANY NATIVE PLANT YOU PLANT WILL MAKE A DIFFERENCE

MOST WILL SURVIVE DESPITE ANY ERRORS YOU MAKE

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