



# Cowlitz County

WASHINGTON STATE UNIVERSITY  
EXTENSION



# SETTING UP A WINTER GARDEN











Fleur Storm

STORM  
SHIELD





The Rewards

Daikon Radish January 1





# Daikon Radish, Leek, Carrots, Kale, January 1









# It's Possible to garden year-round in the Pacific Northwest





TILTH ALLIANCE'S



SECOND EDITION

# maritime northwest garden guide

PLANNING CALENDAR FOR  
YEAR-ROUND ORGANIC GARDENING



ARTICHOKE, *CYNARA CARDUNCULUS*

**tilth**  
ALLIANCE

WHERE GOOD FOOD GROWS



# Celery



# Cabbage





# Swiss Chard and Parsley on January 17 after 1 foot of snow





# Overwintered Beets



# Kale--February





# Carrots (March 16), Kale, garlic





# Garlic February 10





# Year-Round Gardening in the Pacific Northwest

- Marine climate—temperate climate-the Pacific causes solar warmth to build up slowly and be released slowly. And winds bring moderately cool moist air in from the Pacific.
- The Cascades shelter us from harsher weather east of the mountains.
- Historically, we have had cool-moderate springs lasting into June.
- Our fall weather usually starts in Mid-August and often stays mild into mid November. This makes soil temperature important and our cool night temperatures can make it important to help out our less hardy plants. Frost dates are often unpredictable though our average first frost date is mid-November.



# Microclimates vary because of

- Where the sun moves
- What trees or buildings block it.
- Where wind moves through
- Or a south-facing wall
- Dips where cooler air drops down



# Zone maps can help to a degree

- A record of your first frost date can help guide you.
- If you're at higher altitudes choosing shorter maturity crops can make all the difference in your success rate.
- Choose plants that fit within your hardiness zone.



# Timing your planting

- In the fall because of lessening sunlight and warmth plant growth slows so allow 2-3 additional weeks extra beyond the stated maturity time for the plants you choose and if you're not going to protect tender crops add an extra 4 weeks to the expected harvest date.
- Growth basically stops and only maintains when the sunlight drops to 10 hours a day. This is approximately October 15<sup>th</sup>.
- Plan on crops maturing but not bolting before the cold weather.
- Plan on hardy plants being finished with their new growth before freezing temperatures.
- Low temperatures reduce photosynthesis and therefore also slow growth. Plants grow best when there is 10-15 degrees difference between daytime and nighttime temperatures.

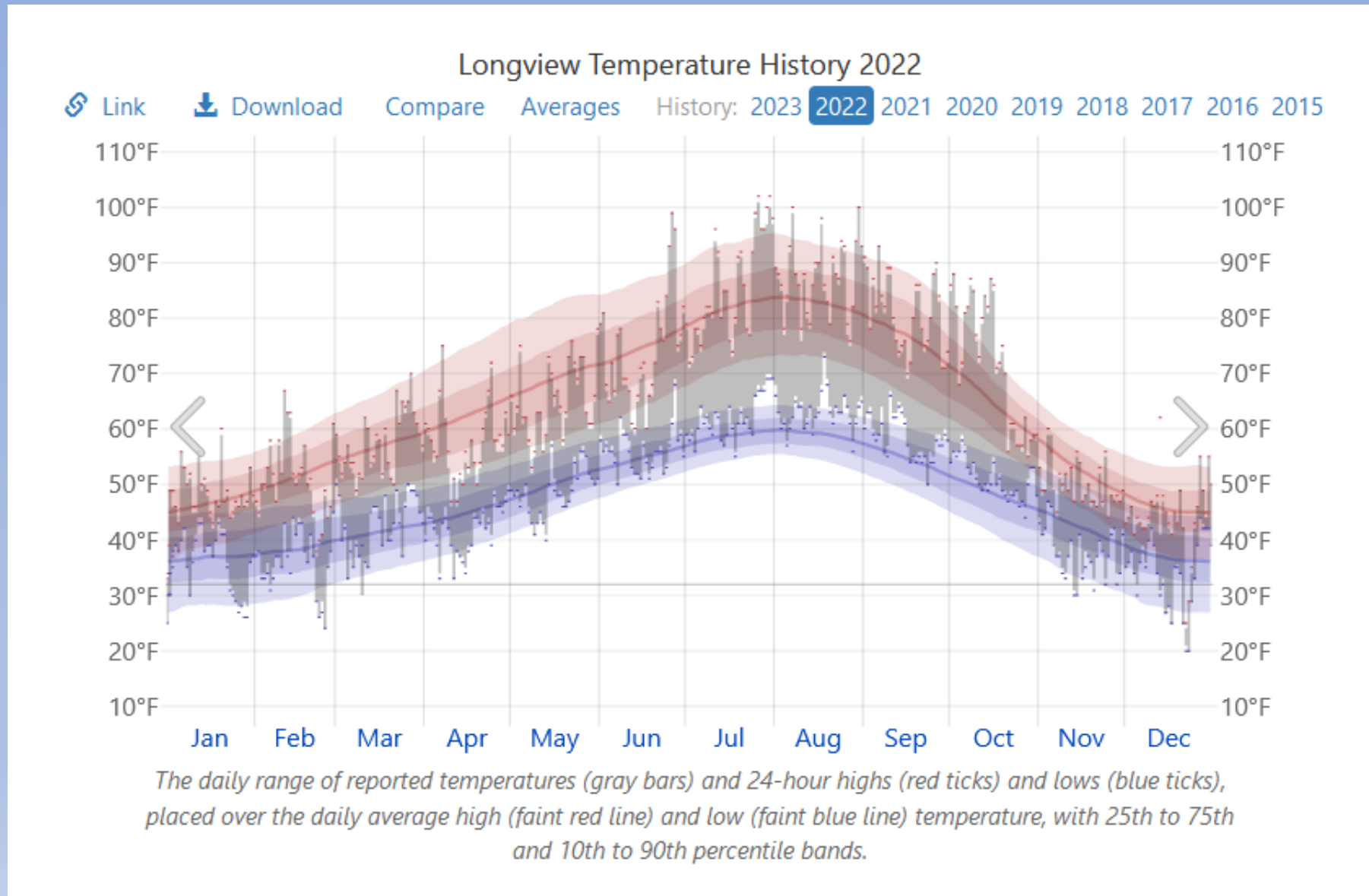


# Timing your planting

- Purchasing or growing transplants can give you the additional time you need for your fall or winter garden to mature prior to freezing weather.
- .



# Longview Temperature graph 2022





Plants still need water in the winter. If it freezes hard they may desiccate. Water well if necessary before freezing temperatures.

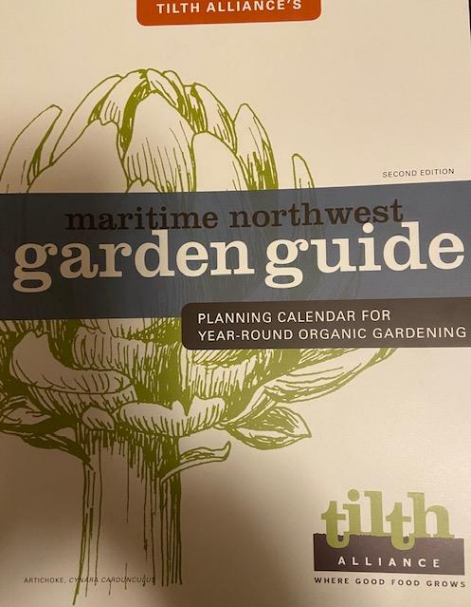
Hardy vegetables can withstand temperatures below 28°F but tender foliage will not.

Time planting so that new growth is hardened off before frost.









# Year-round gardening calendar and chart Second Edition

Includes days to harvest

Sowing date range

Planting date if transplant

Last sowing date

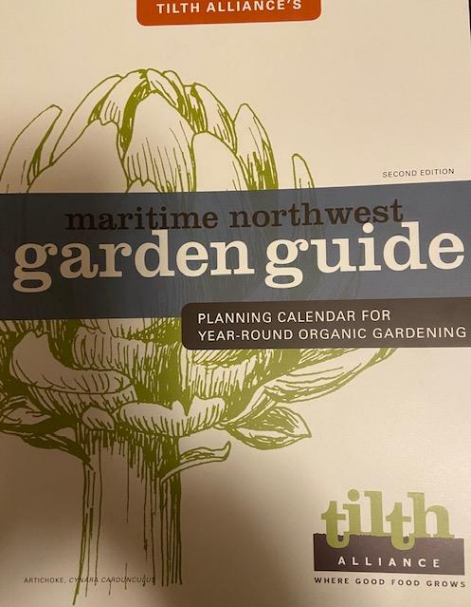
Harvest season

Hardy to Temperature °F

Frost Protection needed

Detailed plant lists for each month





Available at [tilthalliance.org](http://tilthalliance.org)

\$18.95

Also in Amazon—be sure to get the 2<sup>nd</sup> Edition



# Some plants that withstand heavy frost

Arugula

Fava Beans

Beets

Overwintering Broccoli

Overwintering Cabbage

Chinese Cabbage

Carrots

Cauliflower

Cilantro

Collards

Garlic

Kale

Lettuce

Kohlrabi

Parsley

Pearl Onions

Mustard Greens

Pak Choi

Parsnips

Overwintering Peas

Spinach

Swiss Chard

Turnips



# Site selection is important

## Drainage



Where the sun is in the winter  
Likely different  
Than in the summer





**Perc testing your soil can be helpful  
when planning a garden site**







**Adding lots of  
organic matter  
Makes a big  
difference**



**Raised beds can help**





A close-up photograph of a person's hand holding a small, brown, bulbous plant root, likely a tulip bulb, over dark, rich soil. The background is filled with green foliage, including long, narrow leaves and small purple flowers, suggesting a garden setting. The lighting is natural, highlighting the texture of the soil and the hand.

**What you Plant  
and  
When you plant  
determine success**



# What to Plant for Fall?





A close-up photograph of a person's hand planting a shallot bulb into dark, rich soil. The hand is positioned on the right side of the frame, with the thumb and index finger holding the bulb. The soil is dark brown and appears moist. In the background, there are green plants, including what looks like an iris on the left. The overall scene is outdoors, likely in a garden or field.

**What to Plant for Fall?**  
**Fall greens – easy**  
**May have fresh salads**  
**into November**





**August**

**Plant under succession plants for protection**

**Use transplants rather than seeds**

**May plant slightly deeper, keep moist**

**Cover seeds with moist compost/soil**

**mixture and wet burlap**





The middle of August is usually cooler  
so easier to direct seed—easier to keep  
moist

Make a cover soil of sifted compost and  
soil

Lightly cover seeds 2-3 times their  
thickness

Covering with moist burlap can help





**August**

**Beets**

**Spinach**

**Swiss Chard**

**Kale**

**Radishes**

**Carrots**

**Onions**



A close-up photograph of a person's hand planting a small seedling into dark, rich soil. The hand is positioned on the right side of the frame, with the thumb and index finger holding the base of the seedling. The background is a soft-focus garden with various green plants and soil. The text is overlaid on the left side of the image in a bold, yellow font.

**Late August**

**Spinach**

**Miner's Lettuce**

**Arugula**

**Asian Greens**

**Cabbage**

**Mustard greens**



A close-up photograph of a person's hand planting a small, brown, conical seedling into dark, rich soil. The hand is positioned on the right side of the frame, with the thumb and index finger holding the seedling. The background is a blurred garden with green foliage and a small purple flower. The text is overlaid on the left side of the image in a bold, yellow font.

**Late August**

**Spinach**

**Miner's Lettuce**

**Arugula**

**Asian Greens**

**Cabbage**

**Mustard greens**



October



Fava Beans  
Snow Peas







**Sugar Snaps January 1**



**October**

**Garlic**





**Cover Crops: Hairy vetch,  
Austrian field peas, crimson clover, wheat, oats,  
buckwheat, triticale, winter rye, etc.**





# Cover Crops

Legumes fix nitrogen

Build tilth with legume-grain mix

Build organic matter with non-legumes





# Can benefit nitrogen fixation if you inoculate with inoculant





# Cover Crops: Advantages

protects soil from erosion, may add nitrogen, adds fiber to soil, outcompetes weeds, improves yields by enhancing soil health, reduces need for herbicides, conserve soil moisture, hosts beneficial microbial life, creates inhospitable environment for many soilborne diseases, can create crop rotation.







**October**

**Can still transplant starts of**

**Winter-hardy lettuce**

**Swiss Chard**

**Kale, Collards**

**Corn Salad**

**Endive**

**May need some winter protection**









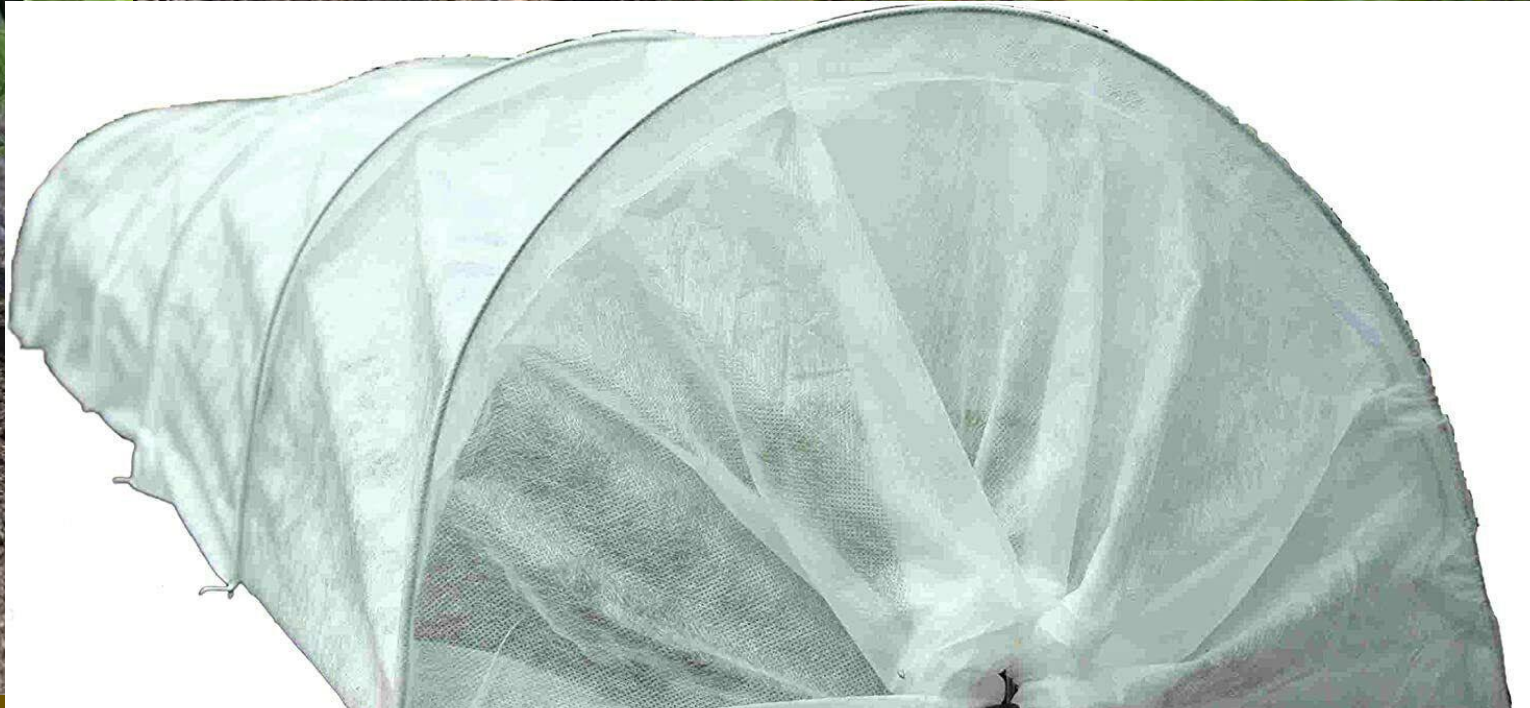


**Secure ground cover with rocks, bricks, staples, etc.**





Heavier row cover is warmer but blocks more light





**Important to have something to keep the covering off of the plant**







**Monitor for heat build up. Open and ventilate as needed.  
Be sure the plants get water.**



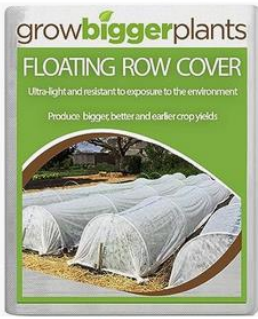


Plant Covers Freeze Protection, 0.9oz 10x50FT Frost Cloth Plant Freeze Protection, Plant Frost Blankets Covers for Outdoor Plants for Winter...

★★★★☆ 83  
50+ bought in past month

**\$22<sup>99</sup>**

✓prime  
FREE delivery **Sat, Aug 12** on \$35 of items shipped by Amazon  
Or fastest delivery **Wed, Aug 9**



Agribion AG-19 Floating Row Crop Cover/Frost Blanket/Frost Cloth/Garden Fabric Plant Cover

★★★★★ 1,567  
50+ bought in past month

**\$17<sup>99</sup>**

✓prime  
FREE delivery **Sat, Aug 12** on \$35 of items shipped by Amazon  
Or fastest delivery **Wed, Aug 9**



Plant Covers Freeze Protection 10 ft x 30 ft Floating Row Cover Garden Fabric Plant Cover for Winter Frost / Sun Pest Protection (10FT X 30FT)

★★★★★ 3,933

**\$17<sup>99</sup>** List: \$49.99

✓prime  
FREE delivery **Mon, Aug 14** on \$35 of items shipped by Amazon  
Or fastest delivery **Fri, Aug 11**



NONMON Plant Covers Freeze Protection 10 ft x 50 ft 0.9oz for Cold Winter Outdoor Plants Vegetable Summer Sun Pest Protection, Floati...

★★★★☆ 7

**\$24<sup>99</sup>**

✓prime  
FREE delivery **Sat, Aug 12** on \$35 of items shipped by Amazon  
Or fastest delivery **Wed, Aug 9**

# Master Gardeners Have row cover Available for \$3.00 For 6'x12'. The Extension office is open 9AM-12:30 PM Mon-Friday

URNEY'S SEED & NURSERY CO. Since 1866

Allow Block

Free Shipping on Orders of \$50 or More. Expires soon

Item Number or Keywords

New Vegetables Fruits Herbs Perennials, Bulbs & Flowers Trees & Shrubs Garden Supplies

Home » Garden Supplies » Season Extenders » Floating Garden Row Cover



### Floating Garden Row Cover

Protect Plants from Frost and Pests

★★★★★ 4.7 11 Reviews Write a Review Q&A 20

SKU	Option
<input checked="" type="radio"/> 2005	61 in x 25 ft row cover
<input type="radio"/> 1998	10 ft x 10 ft row cover
<input type="radio"/> 2007	61 in x 110 ft row cover
<input type="radio"/> 2006	61 in x 55 ft row cover

- Ideal for spring and fall gardening
- Provides frost protection
- Allows partial passage of air, water and sunlight
- Reusable

Don't let a late spring or early fall frost damage your plants. Floating from frosts to about 28 degrees F. Made of soft, polypropylene fibers, they warm th allowing air, light and water to penetrate. The covers are also less abrasive to tender



### GRO-THERM PERFORATED TRANSPARENT FILM

*Heat-loving plants rejoice!*  
Designed to warm up the growing environment for heat-loving crops like melons, eggplants, peppers, et Especially good in northern gardens and for very early plantings. Gardeners can expect daytime temper under this film to be almost 10 degrees higher than under Reemay. Gro-Therm is better than floating ro for crops that need high light intensity and warmth. Gro-Therm's evenly spaced holes allow for consist conditions. The 1 mil film has 300 holes per square yard for ventilation, eliminating the need to remov on a hot day.

**SELECT OPTION**

6' x 20' more ▾  1  **\$17.95**









# Seed Selection

Only plant hardy or overwintering seeds for winter or early spring harvest





**Semi-hardy vegetables can  
withstand light frost—28-32°F  
Hardy vegetables can withstand  
lower temperatures—the tops may  
die but the roots will survive.**



A photograph of a raised garden bed. The bed is filled with dark soil and various green plants, including leafy greens and tall stalks. Several silver metal arches are placed over the plants. The garden bed is bordered by wooden planks. In the background, there is a wooden fence and more greenery. A concrete path is visible on the right side of the garden bed.

**Pacific Northwest Seed  
companies  
See attached list**





**Planting**





Ruby Bell Improved F  
75 days, 5-17. 7/14 2026

Super Cornish Blue  
45-65 days  
7/14 2-15



4 days later



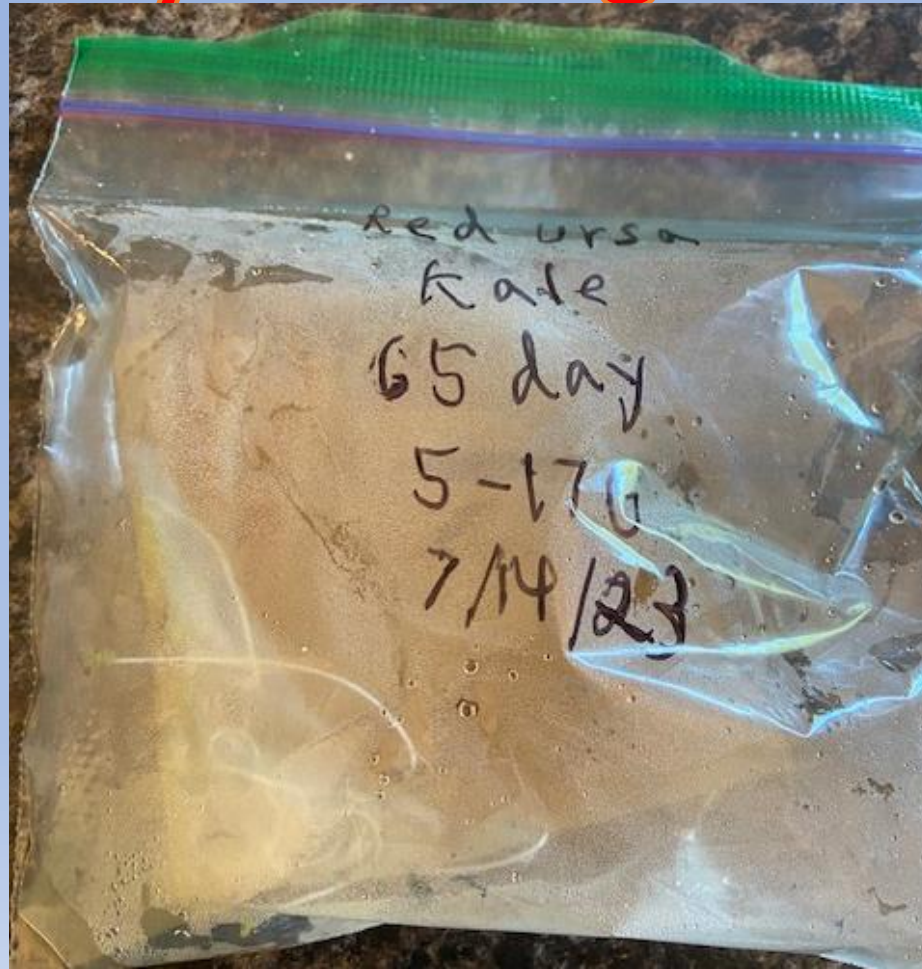


# 11 days later





**Sprouting in a coffee filter  
And a sandwich ziplock bag  
Can cut 5-7 days off of germination time**





# Slug eggs









# Cabbage Butterflies



Foto: Peter Häger, 2011





# Cabbage Maggot

Rotate crops and cover with row cover





# Lettuce—hardy to 10°F with a cloche





# Overwintering Vegetables







So Much to  
ENJOY!!!



