# meadows+more



INTO THE WEEDS:
How to Garden like a Forager

# WHAT IS FORAGING: the myth of the hunter gatherer; the myth of the Wild



# Wherever there is the "wild" people around the world are enjoying and managing these plants

- Global cultures enjoy wild fruits and herbs
- Japan: nanakusa
- Italy: preboggian wild fennel, mustards
- NOMA
- England: hedgerows



Reconnecting with our past and making them delicious today.

When is peak? What parts? How to prepare?

orange daylily.

Shoots Flavor = mild leeks x French beans.

Buds Flavor = Crunchy asparagus like.

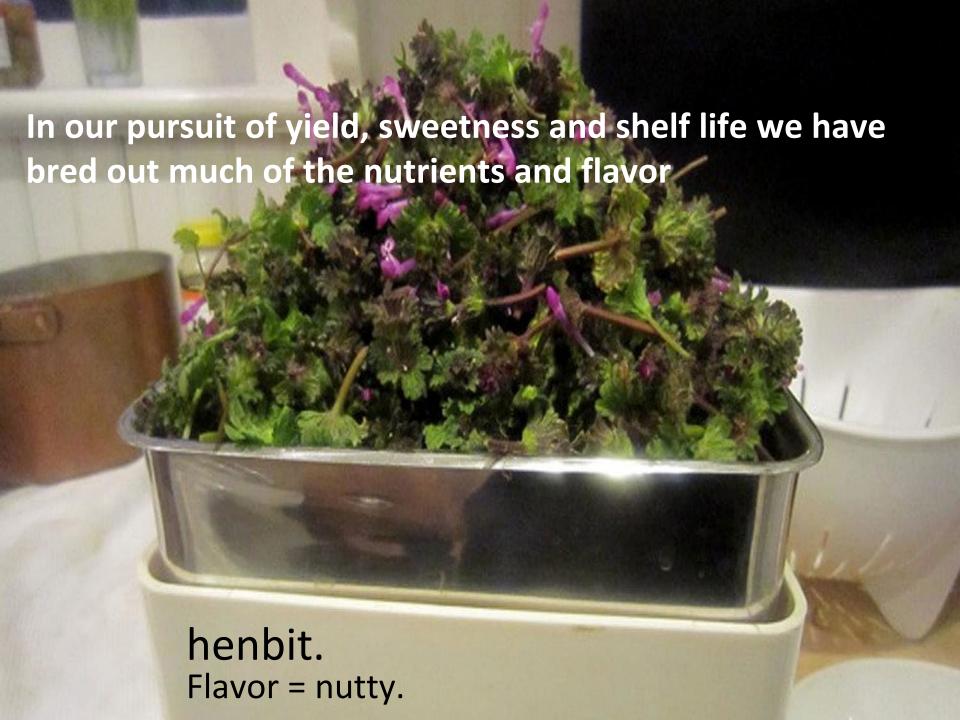
© Thomas Schauer



### SO what?

- Fragility of food system to climate change and disease
- Environmental monocultures
- Health: most people eat only 25 vegetables
- FOUR crops are 60% of modern diet: corn, soybean, wheat and rice





# Plants that experience "stress"

- Plants under stress are especially nutritionally dense, particularly leafy greens
- Xenohermetic molecules (Harvard Medical School)
- The chemistry of wild plants
- Primary metabolites
- Secondary metabolites



Insect holes

# "Eat food. Not too much. Mostly Plants"

- Michael Pollan: top two are lambsquarters and purslane
- Avoid: "edible food-like substances"
- Small amounts of plants, in diversity
- Freezing, blanching, drying





# Lambsquarters



## **Purslane**



Omega 3; also component of traditional Chinese medicine

## What is wild? What is a garden?

#### OUT:



- Design; people centered style
- Planting
- High maintenance
- All or nothing: all natives, all pink flowers, or all lawn
- ALL ABOUT CONTROL and where and what to plant

#### <u>IN:</u>



- Natures Design and Asymmetrical Rhythms
- Free range , diversity of plants
- Multi-purpose: food, arrangements, refuge, upcycling
- ALL about DANCING with what is there, on a unique place on earth

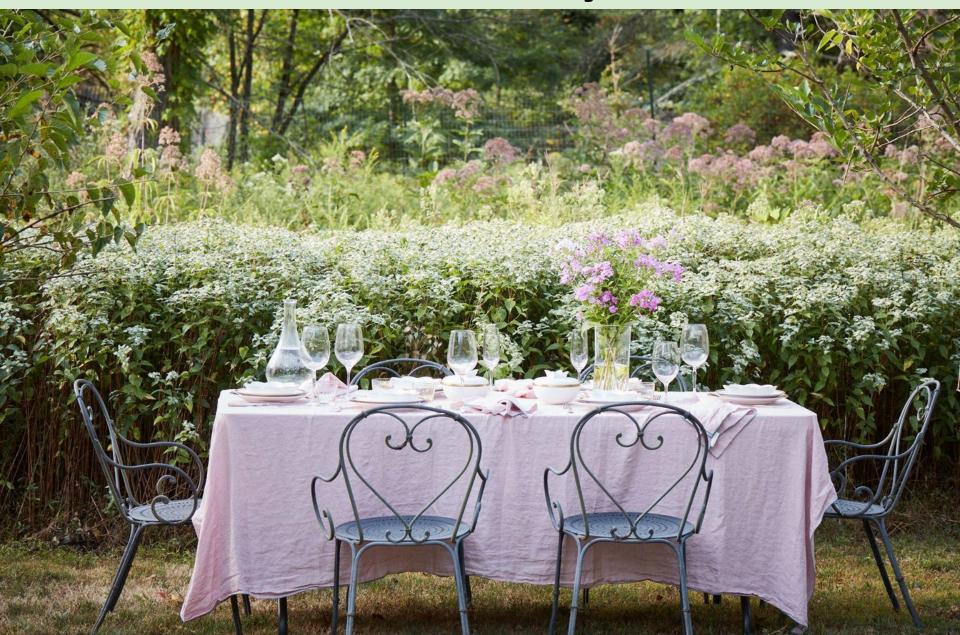
# A Planted Garden Design



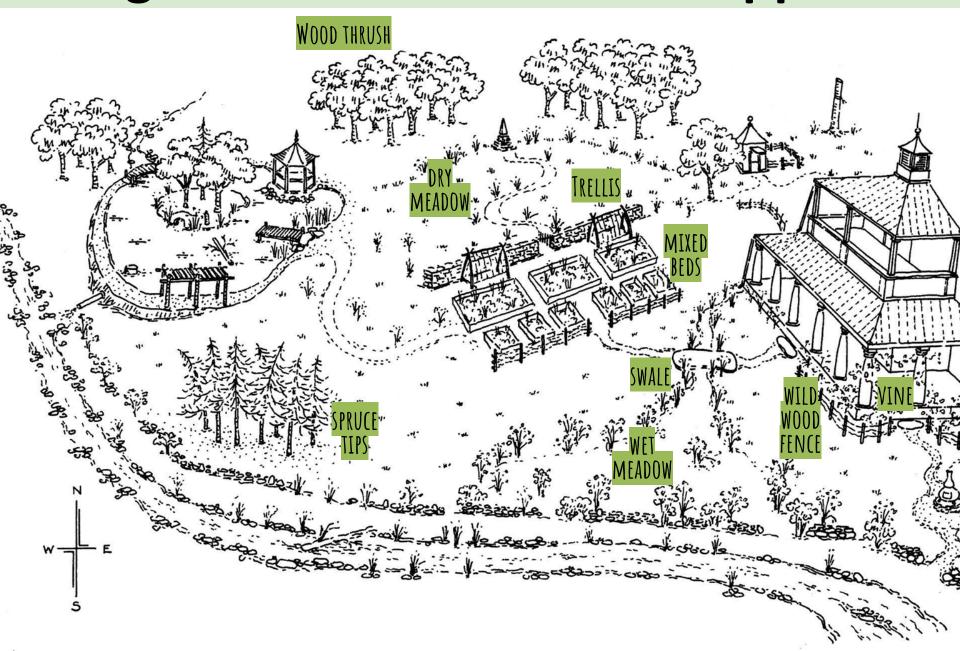
# Backyard



# A Wild Backyard



# Forager's Garden: A Holistic Approach



# Nature's Design elements for gardening in the anthropocene

- Water
- Light
- Wind

- Soil: handout
- Plants



See handout and website: www.MeadowsAndMore.com

# The wild plants that come up tell the story of your time and place

Singular and unique

Local biodiversity

Native? Nonnative or adventist?

What community grows there

Soft rush (*Juncus* effusus) = OBL = wet 99%

Floristic Quality
Assessment Index (FQAI)



# How to start? Making a Wildish Patch

#### 1) MARK A plant or 2) DO 3) MARK & FALLOW PATCH **NOTHING ENCLOSE** You can find patches Pause this Mark plants of wild here and there spring that come up Not too wet or too dry Observe what Make Avoid spaces covered comes up temporary with invasives such as enclosure with honeysuckle, mugwort, fallen logs or knotweed.



# FIND THE PLANTS WHERE THEY WANT TO GROW: If they don't "fit" in the bed, pick them from outside the

bed, or make an

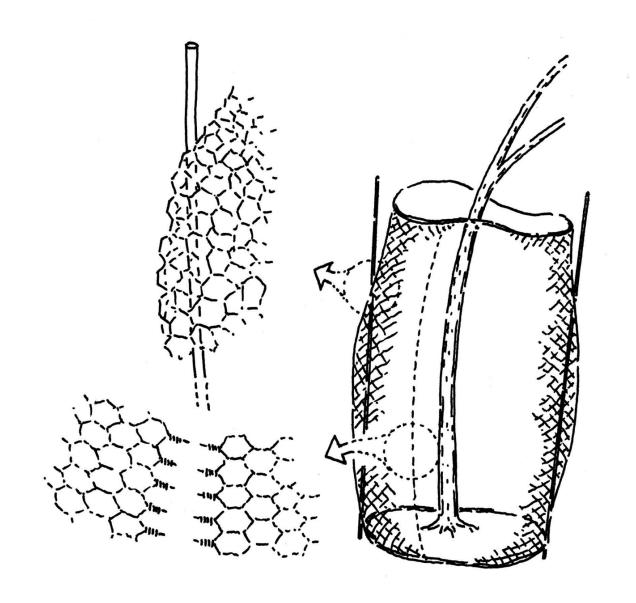
"ANNEX"



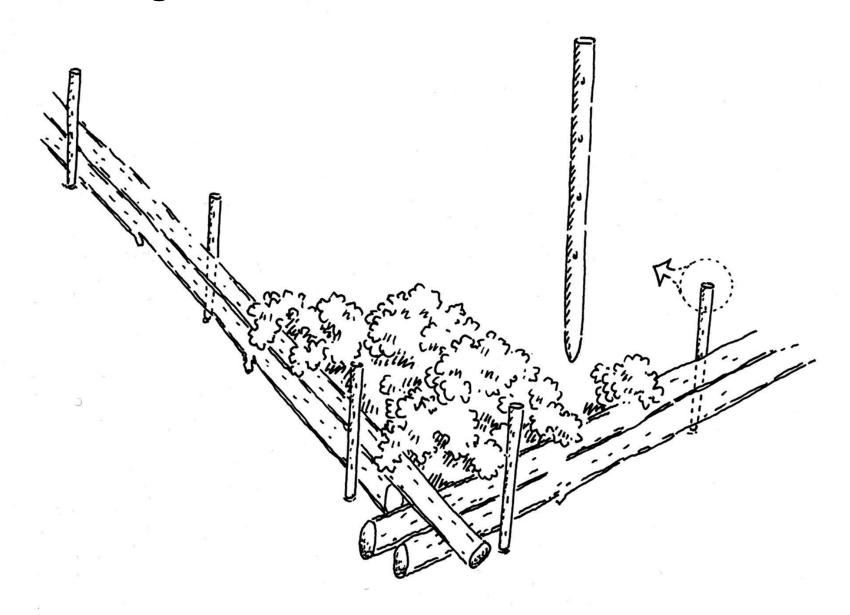
# Mark Deadwood Standing

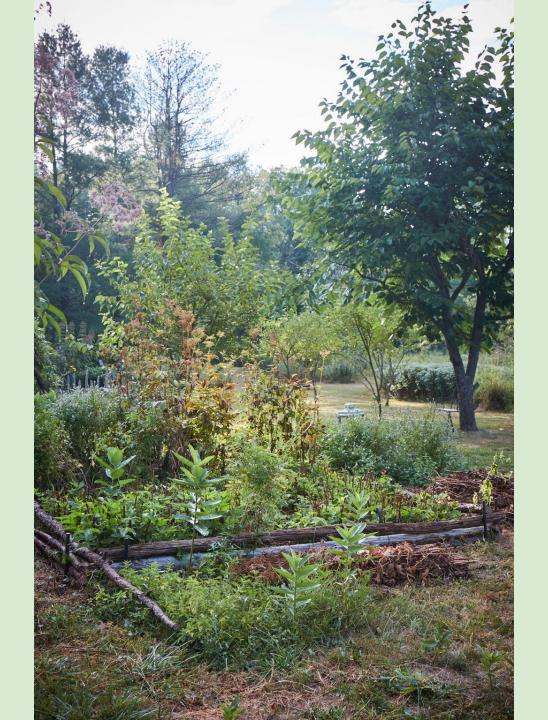
- Leave dead wood
- Mark it with wrapping (ex-Shimenawa)
- Be intentional, not neglectful

## **Chicken Wire Cage**



## **Enclosing a Wildish Patch**





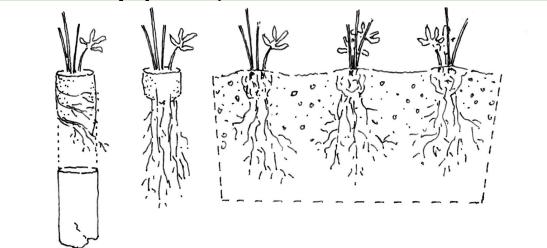
# **Gardens of the Anthropocene**

- Plants are some of the most adaptable and resilient, chemically
- Plant based gardens always change. Some only bloom once in several years. Some will spread, others will wink out.
- As change accelerates we strive towards balance, diversity and resilience. We cannot control but we can steward

# To plant or not to plant?

"Let nature do the planting and learn how much of what she plants is food, medicine or both."

- Let standing method
- Kickstart by planting (pocket meadow or trench planting) but let nature fill in
- Don't overly plan, nature isn't a row of emojis



## Weeds are part of the future

- Survivors
- Flavor dense
- Nutrient dense
- Available
- Delicious
- Sturdy
- No inputs: irrigation, fertilizer, soil amendments



## Thousands of edible plants around us

- Delicious (top ten)
- Tastes good but too much trouble
- Edible but tastes like cardboard
- Neither edible nor toxic
- Toxic
- Poisonous



# **Sustainability Code**

- Invasive (includes ornamentals)
- Nonnative (includes vegetables)
- Native: generalists
- ◆ Native: specialists

Based on the ecological behavior of the species in the landscape. All green plants are not the same. Some thrive on and are indicators of disturbance.

# Managing (and Harvesting) Invasive Species

- Learn how the plant spreads: burning or cutting to the ground can invigorate underground rhizomes (mugwort)
- Cutting vines using the window method
- Prolific seeders (garlic mustard) cut off tops before in full flower.
- Eat those wineberries and autumn olives!
- Avoid digging and cutting at nodes
- Weed Warriors



#### **Garlic Mustard Pesto**

(recipe on Food52.com)

#### **Ingredients**

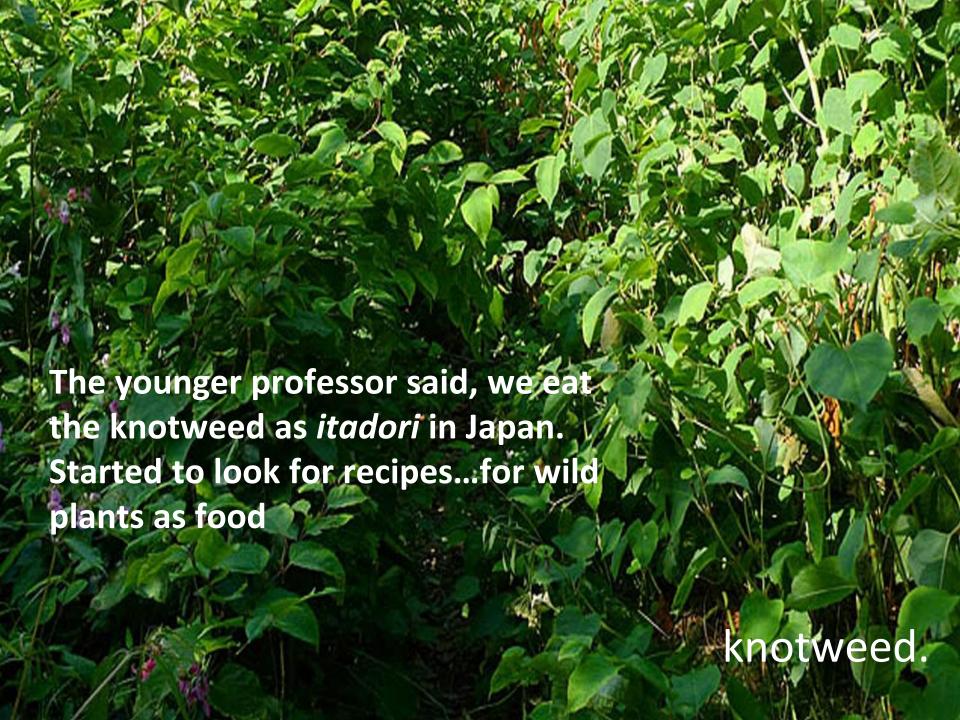
- 11 cups lightly packed LIGHT GREEN garlic mustard leaves and tips, loosely chopped
- 1/4 cup pine nuts or pecans
- 1/3 cup grated parmesan cheese
- 1 cup extra virgin olive oil
- 1/2 teaspoon salt
- 1/2 teaspoon sugar
- 2 squeezes lemon juice



#### **Directions**

- 1. In a blender, grind the pine nuts and parmesan.
- 2. Add the garlic mustard.
- 3. While blending, pour in a steady stream of the olive oil for 1 minutes, or until smooth.
- 4. Add salt, sugar, lemon juice and pulse until mixed.





# Cutting at the internode









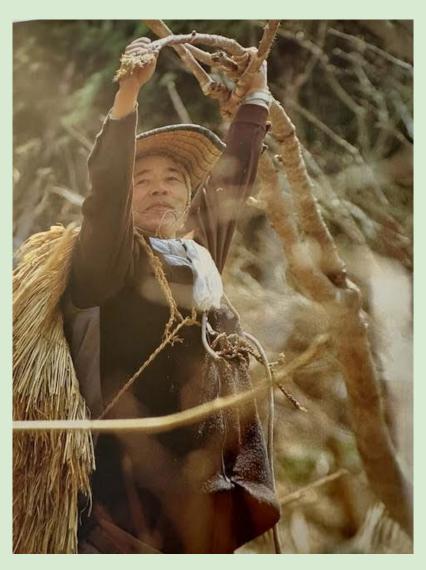
# Aralia elata: another decapitation control method



#### Aralia response to mowing

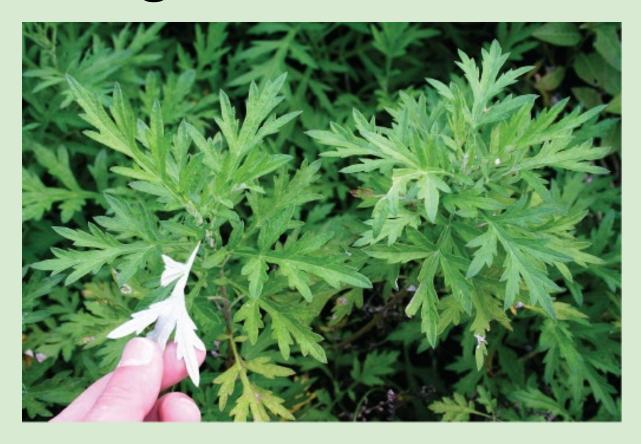


### **Aralia foraging in Japan**



#### Mugwort (Artemisia)





- Invasive: spreads mainly by rhizome
- Medicinal from antimalarial to wormwood
- Korea: mugwort wellbeing spa

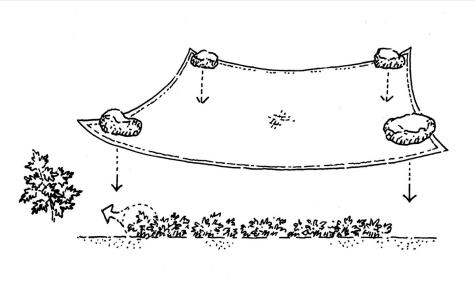
Table 4

Differences in the composition of essential oils from the herb of A. vulgaris of various origins.

Origin of Plants	Main Components	References
Brazil	caryophyllene (37.45%)	[ <u>67]</u>
	germacrene D (16.17%)	
	humulene (13.66%)	
	borneol (6.80%)	
	caryophyllene oxide (5.67%)	
France	camphor (1-13%)	[73]
	1,8-cineole (1-23%)	
	terpinen-4-ol (1-19%)	
Germany	sabinene (16%)	[ <u>74</u> ]
	myrcene (14%)	
	1,8-cineole (10%)	
India	α-thujone and thujone isomer (β-thujone)	[75]
	camphor	
Italy	camphor (47%)	[76]
	camphor (2-20%)	[72]
	myrcene (9-70%)	
	1,8-cineole (1-27%)	
	borneol (3-18%)	
Lithuania (North part)	sabinene (0-8.4%)	[ <u>62</u> ]
	β-pinene (0.1–12.9%)	
	1,8-cineole (2.6-17.6%)	
	cis-thujone (0-12.9%)	
	trans-thujone (0-20.2%)	
	chrysanthenyl acetate (0-23.6%)	
	caryophyllene (2.5–12.2%)	
	germacrene D (5.3-15.1%)	
Morocco	thujone/isothujone	[78]
	camphor	
Vietnam -	β-caryophyllene (24%)	[ <u>79</u> ]
	β-cubebene (12%)	
	β-elemene (6%)	
	1,8-cineole	
	camphor	[80]

#### **Mugwort Control**





# Martha Stewart's Mugwort Soup (young mild leaves)





# Japanese honeysuckle (Lonicera japonica)

- Native to East Asia, culinary susukusa (the honey from the flower) and common Chinese medicinal properties: jinyinhua (means gold/silver flower) (flowers just before blooming)
- In the United States, invasive east of the Mississippi
- Growth habit a vine: Covers the forest floor, climbs and strangles trees

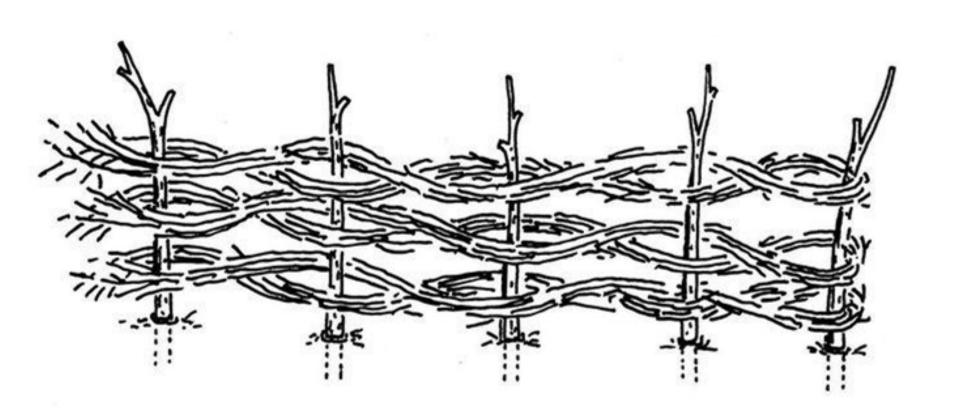


### Japanese honeysuckle •





#### Honeysuckle fencing





### Stinging nettles •



#### Weed Warrior Pilot Program

- Maryland Parks 12,000 hours
- <u>Level One</u>: online education module and field training and supervision. Start with vines and window method
- <u>Level Two</u>: supervisors: more species. Organized groups
- Record keeping and data gathering



Weed Warriors Pilot Program

Mercer and Hunterdon County sign up:

meadowsandmore.com

### Besides eating we can Upcycle weeds, branches

- Arrangements
- Firestarters from dead juniper branches
- Pine and evergreens
- Smudge sticks
- Citrus leaves
- Fig leaves













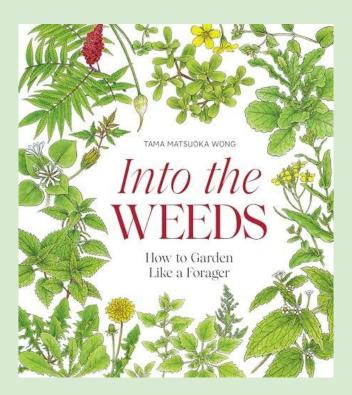
### Respect the plants and restore the earth. Eat well.



"THIS ELOQUENT WORK MOVES
SEAMLESSLY BETWEEN THE
PRACTICAL AND THE
EXPERIENTIAL. IT IS A MUST
READ FOR ANYONE WHO SEEKS
TO BECOME MORE INTIMATE
WITH THE LAND ON WHICH THEY
LIVE."



co-author of *Garden Revolution:*How Our Landscapes Can be a
Source of Environmental Change





"I LOVE THIS BOOK. AFTER
READING THIS I SAW MY GARDEN
IN A COMPLETELY NEW LIGHT
AND BEGAN TO SEE THE BOUNTY
THE LAND IS OFFERING AND THE
INVITATION FOR ME TO ENGAGE
MORE DEEPLY THAN I HAVE
BEFORE."

**Bryan Thompson-Nowak** 

Director of Education, Morris
Arboretum, University of
Pennsylvania