

April, 2022

Public Library, Broad Street

The VINE

"The Real Dirt from the Keyport Garden Club"

Table of Contents

10:00 a.m. - 6:00

		Page
Events to Catch		1
To Do in the Garden.		23
An Iconic Exotic		24
Season's Eatings		28
Events to catch:		
(Please note: som	e events require fees a	nd/or preregistration)
Keyport:		
Saturday, April 9		
9:00 a.m 12:30	Beach Sweep	Cedar Street Park, Cedar Street
p.m.		
Sunday, April 24		
10:00 a.m.	Cardon Claanun	Conjur Contar Second Street
10:00 a.m.	Garden Cleanup	Senior Center, Second Street
Friday, April 29		

Take and Make Craft for

p.m.	Adults	

Elsewhere:

Friday, April 1

may, April 1		
8:00 - 9:00 a.m.	Spring Migation Bird Walk	Lorrimer Sanctuary, Franklin Lakes
9:00 - 11:30 a.m.	Managing Turfgrass Insects: Introduction to Insects	Rutgers New Jersey Agricultural Experiment Station, online
9:00 a.m 12:00 p.m.	Birding	Raritan Bay Waterfront Park, South Amboy
10:00 a.m.	Jonathan Green Free Lawn Workshop	Biondi's Florist and Greenhouses, Middlesex
11:00 a.m 12:00 p.m.	Terrarium Building	Calgo Gardens, Freehold
12:00 - 1:00 p.m.	Flooding to Flourishing Fridays Learn Creative Stormwater Management Methods	Pinelands Allliance, online

Saturday, April 2

7:00 - 9:00 a.m.	Bird Walk	Environmental Education Center, Basking Ridge
8:00 - 9:00 a.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
8:00 - 9:00 a.m.	Morning Walk	Scherman Hoffman Wildlife Sanctuary, Bernardsville
8:00 - 10:00 a.m.	Bird Walk	Cloverdale Farm Park, Barnegat
8:00 - 10:00 a.m.	Birding	State Park, Cape May Point
8:45 a.m 1:30	Birding	Sandy Hook, MIddletown

p.m.		
9:00 - 11:00 a.m. or	Creative Containers: Sunny	Longwood Gardens, Kennett
1:00 - 3:00 p.m.	Spring Plantings	Square, Pennsylvania
9:30 - 11:30 a.m.	WOW-Worthy Container Gardening from Spring through Fall	Deep Cut Gardens, Middletown
10:00 - 11:30 a.m.	Introduction to Bee Keeping	Cloverdale Farm Park, Barnegat
10:00 a.m 12:00 p.m.	April Fool's Hike	Shuster Pond Preserve, Green
10:30 a.m. or 1:30 p.m.	Guided Tour	Reeves-Reed Arboretum, Summit
1:00 - 3:00 p.m.	Spring Foraging Workshop	Duke Farms, Hillsborough
1:00 - 4:00 p.m.	Sensory Celebration	Van Vleck House and Gardens, Montclair
2:00 - 3:00 p.m.	Signs of Spring Nature Walk	Cattus Island Park, Toms River

Sunday, April 3

7:30 - 9:30 a.m.	Above Par Birding	Cox Hall Creek Wildlife Management Area, Villas
10:00 a.m.	Nature Walk	Mill Creek Marsh, Secaucus
10:30 - 11:45 a.m.	Introduction to Composting	Deep Cut Gardens, Middletown
1:30 - 3:00 p.m.	Talk and Tour	Reeves-Reed Arboretum, Summit
1:30 - 3:00 p.m.	Interpretive Trail Hike	Rancocas Nature Center, Westampton
2:00 - 3:00 p.m.	Signs of Spring Nature Walk	Cattus Island Park, Toms River
2:00 - 3:00 p.m.	The Art of Bonsai: Spring Cleaning and Repotting	Calgo Gardens, Freehold

2:00 p.m.	Discovery Nature Walk	Jakes Branch Park, Beachwood

Monday, April 4

7:30 - 9:30 a.m.	Birding	South Cape May Meadows, Cape May
9:00 a.m 3:30 p.m.	Introduction to Pruning Techniques	Holly House, New Brunswick
6:30 p.m.	The Tuileries Garden: The Royal Walk from the Louvre to the Champs-Elysees	Senior and Community Center, Ewing Township

Tuesday, April 5

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10:00 a.m 12:00	Annual and Perennial Garden	Avis Campbell Gardens,
p.m.	Planning Workshop	Montclair
12:00 - 1:00 p.m.	Lunchtime Tour: Spring	The Scott Arboretum of
	Ephemerals	Swarthmore College, online
2:00 - 2:30 p.m.	Growing in the Garden Who's Hatching	Macculloch Hall, online
6:30 - 7:30 p.m.	An Integrated Approach to	Middlesex County Master
	Deer Control - RU Ready 2	Gardeners, online
	Garden	
		I and the second

Wednesday, April 6

7:30 - 9:30 a.m.	Migration	State Park, Cape May Point
9:00 - 11:30 a.m.	Managing Turfgrass Insects: Identfication, Biology and Special Control Considerations	Haverford College Arboretum, Haverford, Pennsylvania
11:00 a.m.	Cherry Blossom Talk	Branch Brook Park, Newark

12:00 - 1:00 or 7:00 - 8:00 p.m.	Rain Garden 101 How To Build a Rain Garden	Pinelands Alliance, online
1:00 - 2:00 p.m.	Wednesday Walkabout	Jenkins Arboretum, Devon, Pennsylvania
1:00 - 2:30 p.m.	Cream Tea	Reeves-Reed Arboretum, Summit
1:30 - 3:30 p.m.	Talk and Tour	Reeves-Reed Arboretum, Summit
4:30 - 6:30 p.m.	Birds of Nummy Island	Nummy Island, Middle Township
6:30 - 7:30 p.m.	Backyard Wonders: Exploring Nature Photography	Reeves-Reed Arboretum, Summit
6:30 - 8:00 p.m.	Sustainable Beekeeping	Rutgers New Jersey Agricultural Experiment Station, online
6:30 - 8:00 p.m.	Fred Clarke: The 80% Grower	Central Jersey Orchid Society, online
7:00 - 9:00 p.m.	Easy Care Roses and Perennials for Your Garden	Public Library, Wayne

Thursday, April 7

8:00 - 10:30 a.m.	Bird Walk	Greenwood Gardens, Short Hills
10:00 a.m 12:00 p.m.	Multirhythmic Flower Design Workshop	Avis Campbell Gardens, Montclair
1:00 - 2:30 p.m.	Spring Flowering Shrub and Tree Walk	Snug Harbor Cultural Center and Botanical Garden, Staten Island, New York
2:00 - 3:00 p.m.	Beatrix Farrand, Garden Artist, Landscape Architect	The Nature Conservancy, online
7:00 - 8:30 p.m.	Planning Your Vegetable	Essex County Master

	Garden	Gardeners, online
7:00 p.m.	Biblical Botany	Frelinghuysen Arboretum, online

Friday, April 8

Friday, April 8		
7:30 - 9:30 a.m.	Birding	Higbee Beach Wildlife Management Area, Lower Township
7:45 - 9:45 a.m.	Birding	Higbee Beach Wildlife Management Area, Lower Township
8:00 - 9:00 a.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
9:00 a.m 12:00 p.m.	Birding	Raritan Bay Waterfront Park, South Amboy
9:00 a.m 3:30 p.m.	Diseases and Pests of Trees	Holly House, New Brunswick
10:30 a.m 12:00 p.m.	Coffee and Croissants	Reeves-Reed Arboretum, Summit
11:00 a.m 12:00 p.m.	Terrarium Building	Calgo Gardens, Freehold
12:00 - 6:00 p.m.	Southeastern Pennsylvania Orchid Society International Orchid Show	Greater Philadelphia Expo Center, Oaks, Pennsylvania
3:00 - 5:00 p.m.	A Meadows Afternoon	South Cape May Meadows, Cape May
4:00 - 6:00 p.m.	Native Plants for Pollinators	Deep Cut Gardens, Middletown

Saturday, April 9

7:00 - 9:00 a.m.	Bird Walk	Environmental Education

		Center, Basking Ridge
8:00 - 9:00 a.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
8:00 - 9:00 a.m.	Morning Walk	Scherman Hoffman Wildlife Sanctuary
8:00 - 10:00 a.m.	Birding	State Park, Cape May Point
9:00 - 10:00 a.m.	Arm Chair Birding	Cloverdale Farm Park, Barnegat
9:00 - 10:30 a.m.	Planning Your Vegetable	Essex County Master
	Garden	Gardeners, online
9:00 a.m 12:00 p.m.	Birding	Raritan Bay Waterfront Park, South Amboy
9:00 a.m 6:00 p.m.	Southeastern Pennsylvania Orchid Society Interantional Orchid Show	Greater Philadelphia Expo Center, Oaks, Pennsylvania
10:00 - 11:00 a.m.	Wonders of Wildflowers	Lorrimer Sanctuary, Franklin Lakes
10:00 a.m - 12:00 p.m.	For the Love of Birds	Snug Harbor Cultural Center and Botanical Garden, Staten Island, New York
10:30 - 11:30 a.m.	Compost Turn and Learn	Snug Harbor Cultural Center and Botanical Garden, Staten Island, New York
10:30 a.m 12:00 p.m.	Plant Flowers that Volunteer	Deep Cut Gardens, Middletown
10:30 a.m. or 1:30 p.m.	Guided Tour	Reeves-Reed Arboretum, Summit
11:00 a.m 1:00	Knowing Native Plants:	Bowman's Hill Wildflower
p.m.	Spring Ephemerals	Preserve, New Hope,
		Pennsylvania or online

11:00 a.m.	Spring Buds and Blooms Tour	Morris Arboretum of the University of Pennsylvania, Philadelphia, Pennsylvania
2:00 - 3:00 p.m.	Welcome Back Osprey	Cattus Island Park, Toms River
2:00 - 3:00 p.m.	Hummingbirds	Cloverdale Farm Park, Barnegat

Sunday, April 10

Sulluay, April 10		
7:30 - 9:30 a.m.	Above Par Birding	Cox Hall Creek Wildlife
		Management Area, Villas
8:00 - 10:00 a.m.	A Place for All Seasons	Sunset Beach, Cape May
8:00 a.m 12:00	Beaver Ecology Tour	Goshen Pond, Shamong
p.m.	Pinelands Adventures	
10:00 a.m 12:00	Bird Walk	Sandy Hook, Highlands
p.m.		
10:00 a.m 5:00	Southeastern Pennsylvania	Greater Philadelphia Expo
p.m.	Orchid Society International	Center, Oaks, Pennsylvania
	Orchid Show	
10:30 a.m.	Public Tour	Laurelwood Arboretum, Wayne
11:00 a.m 2:00	Daffodil Festival and Earth	Van Neste Square, Ridgewood
p.m.	Day Fair	
11:00 a.m 4:00	Daffodil Day	Reeves-Reed Arboretum,
p.m.		Summit
11:00 a.m 5:00	Bloomfest!	Branch Brook Park, Newark
p.m.		
2:00 - 3:00 p.m.	Welcome Back Osprey	Cattus Island Park, Toms River
2:00 - 3:30 p.m.	Natural Dyes from Your	Deep Cut Gardens, Middletown
	Garden	
2:00 p.m.	Discovery Nature Walk	Jakes Branch Park, Beachwood

4:00 - 5:00 p.m.	Bluebird Walk	Environmental Education
		Center, Basking Ridge

Monday, April 11

7:30 - 9:30 a.m.	Birding	South Cape May Meadows, Cape May
10:00 - 11:30 a.m.	Splendid Spring Stroll	Big Brook Park, Marlboro
6:00 - 7:00 p.m.	Summer Bulb Giveaway	PHS Pop-Up Garden at Manayunk, Philadelphia, Pennsylvania

Tuesday, April 12

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7:30 - 10:30 a.m.	Hidden Corners of Belleplain	State Forest, Woodbine
8:30 - 10:30 a.m.	E-Z Birding at Northwood	State Park, Cape May Point
9:00 a.m.	The Casual Birder	Freneau Woods Park, Aberdeen
12:00 - 1:30 p.m.	Fungi Talk	Cumberland County Master Gardeners, Millville
1:00 - 3:00 p.m.	Small Standard Flower Show	The Atrium at Navesink Harbor, Red Bank
12:00 - 1:00 p.m.	Lunchtime Tour: Spring Blooms	The Scott Arboretum of Swarthmore College, Swarthmore, Pennsylvania
1:00 - 2:00 p.m.	Honey Bees	Cattus Island Park, Toms River
4:00 - 7:00 p.m.	South Jersey Twilight Tree Fruit Meeting	Summit City Orchards, Glassboro
6:00 - 7:00 p.m.	Summer Bulb Giveaway	PHS Pop-Up Garden at Manayunk, Philadelphia, Pennsylvania

6:00 - 7:30 p.m.	Overflowing Beauty, Cascading Crescendo: Demonstration and Workshop	Longwood Gardens, online
6:30 - 7:30 p.m.	Going Native with New Jersey's Native Plants RU Ready 2 Garden	Middlesex County Master Gardeners, online
7:00 p.m.	Our Prized Native Azaleas	Frelinghuysen Arboretum, online
7:00 p.m.	Water Wisely	Jersey-Friendly Yards, online
7:00 - 9:00 p.m.	Apitherapy Not Just Stings!	Garibaldi Hall, Roseland

Wednesday, April 13

7:30 - 9:30 a.m.	Migration	State Park, Cape May Point
8:00 a.m 5:00 p.m.	Spring Birding Expedition	Thompson Park, Lincroft
11:00 a.m.	Cherry Blossom Talk	Branch Brook Park, Newark
1:00 - 2:00 p.m.	Wednesday Walkabout	Jenkins Arboretum, Devon, Pennsylvania
1:00 - 2:30 p.m.	Cream Tea	Reeves-Reed Arboretum, Summit
2:00 - 4:00 p.m.	Gardening 101	Reeves-Reed Arboretum, Summit
4:30 - 6:30 p.m.	Birds of Nummy Island	Nummy Island, Middle Township
6:30 - 7:30 p.m.	Rare Finds and Exceptional Specimens: Preserving America's Finest Native Rhododendrons	Native Plant Society/Mid Atlantic Group, online

7:00 - 8:00 p.m.	Providing Habitat at Home	New Jersey Audubon Society, online
6:30 - 8:00 p.m.	The Ins and Outs of Treating Your Colony	Rutgers New Jersey Agricultural Experiment Station, online

Thursday, April 14

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7:30 - 10:30 a.m.	Birds of Belleplain	State Forest, Woodbine
8:00 - 10:00 a.m.	A Walk in the Woods	Wells Mills Park, Waretown
8:30 - 10:30 a.m.	Birding Walk	Verona Park, Verona
5:30 - 7:00 p.m.	After Work Bird Walk	Thompson Park, Lincroft
6:30 - 7:30 p.m.	Oral Histories for Community Gardens	Pennsylvania Horticultural Society, online
6:30 - 7:45 p.m.	Trees Living Apart from Humans	Longwood Gardens, online

Friday, April 15

rriday, April 13		
7:30 - 9:30 a.m.	Birding	Higbee Beach Wildlife
		Management Area, Lower
		Township
7:45 - 9:45 a.m.	Birding	Higbee Beach Wildlife
		Management Area, Lower
		Township
8:00 - 9:00 p.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin
		Lakes
11:00 a.m 12:00	Terrarium Building	Calgo Gardens, Freehold
p.m.		
2:00 - 3:30 p.m.	Natural Dyeing 101	Snug Harbor Cultural Center
		and Botanical Garden, Staten
		Island, New York

3:00 - 5:00 p.m.	A Meadows Afternoon	South Cape May Meadows, Cape May
6:30 - 8:30 p.m.	Evening in the Pines	Pinelands Adventures, Shamong

Saturday, April 16

7:00 - 9:00 a.m.	Bird Walk	Environmental Education Center, Basking Ridge
7:15 - 10:15 or 7:30 - 10:30 a.m.	Belleplain Hotspots	State Forest, Woodbine
8:00 - 9:00 a.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
8:00 - 9:00 a.m.	Morning Walk	Scherman Hoffman Wildlife Sanctuary, Bernardsville
8:00 - 10:00 a.m.	Birding	State Park, Cape May Point
8:00 - 11:00 a.m.	Spring Bird Hike	Awbury Arboretum, Philadelphia, Pennsylvania
8:45 a.m 1:30 p.m.	Birding	Sandy Hook, Middletown
9:30 - 11:30 a.m.	Tough Plants for Problem Areas	Deep Cut Gardens, Middletown
10:00 - 11:00 a.m.	Wonders of Wildflowers	Lorrimer Sanctuary, Franklin Lakes
10:00 a.m 12:30 p.m.	Back Bay Birding by Boat on the Osprey	Miss Chris Marina, Cape May
10:00 a.m 4:00 p.m.	The Garden Conservancy Open Day	The Mountsier Garden, Nutley
10:30 - 11:30 a.m.	Guided Walk	Rancocas Nature Center, Westampton
10:30 a.m. or 1:30	Guided Tour	Reeves-Reed Arboretum,

p.m.		Summit
11:00 a.m 2:00 p.m.	Sowing Seed Potatoes	Longstreet Farm, Holmdel
1:00 - 2:00 p.m.	Early Spring Wildflower Walk	New Jersey Botanical Garden, Ringwood
2:00 - 3:00 p.m.	Nature Walk	Cattus Island Park, Toms River
3:00 p.m.	Nature on the Move	Thompson Park, Lincroft
8:00 - 9:00 p.m.	By the Light of the Pink Moon	Dark Moon Preserve, Green
8:00 - 9:00 p.m.	Full Moon Walk	Freneau Woods Park, Aberdeen
3:00 - 5:00 p.m.	Bird Walk for All People	State Park, Cape May Point

Sunday, April 17

7:30 - 9:30 a.m.	Above Par Birding	Cox Hall Creek Wildlife Management Area, Villas
10:00 a.m 12:00 p.m.	Easter Nature Walk	DeKorte Park, Lyndhurst
10:00 a.m 1:00 p.m.	Back Bay Birding by Boat on the Osprey	Miss Chris Marina, Cape May
1:00 - 2:00 p.m.	Spring Family Hike	New Jersey Botanical Garden, Ringwood

Monday, April 18

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7:30 - 9:30 a.m.	Birding	South Cape May Meadows,
		Cape May
10:00 a.m 1:00	Back Bay Birding by Boat on	Miss Chris Marina, Cape May
p.m.	the Osprey	
6:00 - 8:00 p.m.	Small Space Gardening:	PHS Pop-Up Garden at
	Building the Perfect Spring	Manayunk, Philadelphia,
	Container	Pennsylvania

Tuesday, April 19

ruesuay, April 19		
7:30 - 10:30 a.m.	Hidden Corners of Belleplain	State Forest, Woodbine
8:30 - 10:30 a.m.	E-Z Birding at Northwood	State Park, Cape May Point
9:00 a.m.	The Casual Birder	Holmdel Park, Holmdel
1:00 - 2:30 p.m.	Spring Flowering Shrub and Tree Walk	Snug Harbor Cultural Center and Botanical Garden, Staten Island, New York
2:00 - 2:30 p.m.	Growing in the Garden Earth Day Every Day	Macculloch Hall, online
4:30 - 7:30 p.m.	North Jersey Tree Fruit and Vegetable Twilight Meeting	Alstede Farm, Chester
6:00 - 7:00 p.m.	Growing Organics: To Bee or Not To Bee	Southwark/Queen Village Community Garden, Philadelphia, Pennsylvania
6:00 - 8:00 p.m.	Small Sapce Gardening: Building the Perfect Spring Container	PHS Pop-Up Garden at Manayunk, Philadelphia, Pennsylvania
6:30 - 7:30 p.m.	The Time Is NOW To Start Your Vegetable Garden RU Ready 2 Garden	Middlesex County Master Gardeners, online
7:00 - 8:00 p.m.	Birding Identification Workship: Spring Warblers	Somerset County Environmental Education Center, online
7:00 - 8:00 p.m.	Spotted Lanternfly: Biology and Management	Rutgers New Jersey Agricultural Experiment Station, online
7:00 p.m.	Gardening in the Shade	Frelinghuysen Arboretum, online

7:00 - 9:00 a.m.	Wake Up Bird Walk	Thompson Park, Lincroft
7:30 - 9:30 a.m.	Migration	State Park, Cape May Point
9:00 - 10:30 a.m.	Bald Eagles of Monmouth County	Manasquan Reservoir, Howell
11:00 a.m.	Cherry Blossom Talk	Branch Brook Park, Newark
1:00 - 2:00 p.m.	Wednesday Walkabout	Jenkins Arboretum, Devon, Pennsylvania
1:00 - 2:30 p.m.	Cream Tea	Reeves-Reed Arboretum, Summit
4:30 - 6:30 p.m.	Birds of Nummy Island	Nummy Island, Middle Township
6:30 - 8:00 p.m.	Take Note of Your Hive: Record-Keeping for Bee- Keepers	Rutgers New Jersey Agricultural Experiment Station, online

Thursday, April 21

7:30 - 10:30 a.m.	Birds of Belleplain	State Forest, Woodbine
9:00 - 11:00 a.m.	Spring Birding	Hawk Rise Sanctuary, Linden
10:00 - 11:00 p.m.	Spring Ephemerals Stroll	Jenkins Arboretum, Devon, Pennsylvania
1:30 - 3:30 p.m.	Shorebirds	Wildlife Management Area, Heislerville
2:00 - 3:00 p.m.	Ecological Horticulture in an Evolving World	The Garden Conservancy, online
5:30 p.m.	Plantology on Tap: Plants that Have Shaped Society	Longwood at the Creamery, Kennett Square, Pennsylvania
6:00 - 7:00	Vines for the Home Garden	Pennsylvania Horticultural Society, online

6:30 - 7:45 p.m.	Trees Living in Cities	Longwood Gardens, online
7:00 - 8:30 p.m.	Backyard Forestry in Ninety Minutes	New Jersey Forestry Association, online
7:00 p.m.	The Status and Challenges of Land and Natural Resources Conservation in New Jersey	Frelinghuysen Arboretum, online

Friday, April 22

rriday, April 22		
7:30 - 9:30 a.m.	Birding	Higbee Beach Wildlife Management Area, Lower Township
7:45 - 9:45 a.m.	Birding	Higbee Beach Wildlife Management Area, Lower Township
8:00 - 9:00 p.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
8:00 - 10:00 a.m.	A Walk in the Woods	Wells Mills Park, Waretown
8:3- a.m - 12:30 p.m.	Birding	Sandy Hook, Middletown
9:00 a.m 12:00 p.m.	Birding	Scherman-Hoffman Wildlife Sanctuary, Bernardsville
10:00 a.m 12:00 p.m.	Earth Day Walk	DeKorte Park, Lyndhurst
10:30 a.m 12:00 p.m.	Coffee and Croissants	Reeves-Reed Arboretum, Summit
11:00 a.m 12:00 p.m.	Terrarium Building	Calgo Gardens, Freehold
12:00 - 1:00 p.m.	How Trees Speak to Us: The Human Tree Connection	Morris Arboretum of the University of Pennsylvania, Philadelphia, Pennsylvania

1:00 - 2:00 p.m.	Spring Bluebird Presentation	Clayton Park, Upper Freehold
3:00 - 5:00 p.m.	A Meadows Afternoon	South Cape May Meadows, Cape May

Saturday, April 23

7:00 - 9:00 a.m.	Bird Walk	Environmental Education Center, Basking Ridge
7:00 a.m. or 9:00 a.m.	Bird Walk	Freneau Woods Park, Aberdeen
7:00 - 11:00 a.m.	Double Trouble State Park: Migration and Pine Barrens Ecology	Jakes Branch Park, Beachwood
7:00 a.m 4:00 p.m.	Birds in Flight Spring Edition	State Park, Cape May Point
7:15 - 10:15 or 7:30 - 10:30 a.m.	Belleplain Hotspots	State Forest, Woodbine
8:00 - 9:00 a.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
8:00 - 9:00 a.m.	Morning Walk	Scherman Hoffman Wildlife Sanctuary, Bernardsville
8:00 - 10:00 a.m.	Birding	State Park, Cape May Point
8:45 a.m 1:30 p.m.	Birding	Sandy Hook, Middletown
8:45 a.m 2:00 p.m.	Brigantine	Edwin B. Forsythe National Wildlife Refuge, Galloway
9:00 a.m 12:00 p.m.	Pinelands Alliance Native Plant Sale	Rancocas Creek Farm, Southampton
9:30 - 11:30 a.m.	Easy Care Annuals for Your Garden and Planters	Deep Cut Gardens, Middletown

10:00 a.m. or 12:00 p.m.	Nature Walk	Clayton Park, Upper Freehold
10:00 a.m., 12:00	Nature Walk	Manasquan Reservoir
p.m or 2:00 p.m.		Environmental Center, Howell
10:00 a.m 12:30	Back Bay Birding by Boat on	Miss Chris Marina, Cape May
p.m.	the Osprey	
10:30 - 11:30 a.m.	Compost Turn and Learn	Snug Harbor Cultural Center
		and Botanical Garden, Staten
		Island, New York
10:30 a.m. or 1:30	Guided Tour	Reeves-Reed Arboretum,
p.m.		Summit
12:00 - 3:00 p.m.	Pine Barrens 101	Pinelands Adventures,
		Shamong
1:00 - 2:00 p.m.	Introduction to iNaturalist	Lorrimer Sanctuary, Franklin
		Lakes
1:00 - 4:00 p.m.	Nature on the Move	Turkey Swamp Park, Freehold
2:00 - 3:00 p.m.	Every Day Is Earth Day	Cattus Island Park, Toms River
3:00 - 5:00 p.m.	Bird Walk for All People	State Park, Cape May Point

Sunday, April 24

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7:00 - 11:00 a.m.	Birds of Peaslee Wildlife	Belleplain State Forest,
	Management Area	Woodbine
7:30 - 9:30 a.m.	Above Par Birding	Cox Hall Creek Wildlife
		Management Area, Villas
9:00 - 10:00 a.m.	Nature Walk	Cloverdale Farm Park,
		Barnegat
9:45 - 11:00 a.m.	Your Own Pizza Garden	Deep Cut Gardens,
		Middletown

10:00 a.m 12:00 p.m.	Back Bay Birding by Boat on the Osprey	Miss Chris Marina, Cape May
10:30 a.m.	Public Tour	Laurelwood Arboretum, Wayne
11:30 a.m 1:00 p.m.	Tea on the Terrace	Reeves-Reed Arboretum, Summit
1:00 - 2:30 p.m.	Wines and Pines	Clayton Park, Upper Freehold
1:00 - 3:00 p.m.	Lilac Purple Haze	Willowwood Arboretum, Far Hills
2:00 - 3:00 p.m.	Every Day Is Earth Day	Cattus Island Park, Toms River
2:00 p.m.	Discovery Nature Walk	Jakes Branch Park, Beachwood
2:30 p.m.	Bringing Nature Home: A New Approach to Conservation that Starts in Your Yard	Laurelwood Arboretum, Wayne

Monday, April 25

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7:30 - 9:30 a.m.	Birding	South Cape May Meadows,
		Cape May
10:00 a.m 1:00	Back Bay Birding by Boat on	Miss Chris Marina, Cape May
p.m.	the Osprey	
10:00 - 11:30 a.m.	Splendid Spring Stroll	Manasquan Reservoir, Howell

Tuesday, April 26

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7:30 - 10:30 a.m.	Hidden Corners of Belleplain	State Forest, Woodbine
8:30 - 10:30 a.m.	E-Z Birding at Northwood	State Park, Cape May Point
9:00 a.m.	The Casual Birder	Shark River Park, Neptune
10:00 a.m 12:00 p.m.	Back Bay Birding by Boat on the Osprey	Miss Chris Marina, Cape May

11:00 a.m 12:30	Forest Eats and Wild Treats	Huber Woods Environmental
p.m.		Center, Locust
4:45 p.m.	Heavenly Plants for Hell	Bergen County Master
	Strips	Gardeners, online
6:00 - 7:00 p.m.	Introduction to Mushroom	Haverford College Arboretum,
	Hunting	Haverford, Pennsylvania
6:30 - 7:30 p.m.	The Benefits of Companion	Middlesex County Master
	Planting RU Ready 2	Gardeners, online
	Garden	

Wednesday, April 27

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7:30 - 9:30 a.m.	Migration	State Park, Cape May Point
8:00 a.m 5:00	Spring Birding Expedition	Thompson Park, Lincroft
p.m.		
10:00 - 11:30 a.m.	Spring Wildflower Hike	Clayton Park, Upper Freehold
11:00 a.m.	Cherry Blossom Talk	Branch Brook Park, Newark
11:00 a.m 1:00	Edible Wild Plants	Emergency Squad Building, High
p.m.		Bridge
4:00 - 5:30 p.m.	Floral Spotlight: Let's Get	Longwood Gardens, online
	Tropical	
4:30 - 6:30 p.m.	Birds of Nummy Island	Nummy Island, Middle
		Township

Thursday, April 28

7:30 - 10:30 a.m.	Birds of Belleplain	State Forest, Woodbine
8:30 - 11:00 a.m.	Birding	Hatfield Swamp, West Caldwell
1:30 - 3:30 p.m.	Shorebirds	Wildlife Management Area, Heislerville
2:30 - 3:30 p.m.	Haverfarm Tour	Haverford College Arboretum,

		Haverford, Pennsylvania
5:30 - 7:00 p.m.	After Work Bird Walk	Turkey Swamp Park, Freehold
6:30 p.m.	Landscaping with a Purpose: The Role of Native Plants in Landscape Design	Reeves-Reed Arboretum, Summit or online
7:00 p.m.	Invasive Plants in the Landscape and Native Alternatives	Mercer County Master Gardeners, online

Friday, April 29

7:30 - 9:30 a.m.	Birding	Higbee Beach Wildlife Management Area, Lower Township
7:45 - 9:45 a.m.	Birding	Higbee Beach Wildlife Management Area, Lower Township
8:00 - 9:00 p.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes
8:30 a.m 12:30 p.m.	Birding	Sandy Hook, Middletown
9:00 - 10:00 a.m.	Morning Bird and Wildlife Walk	Big Brook Park, Marlboro
9:00 - 10:30 a.m.	Bald Eagles of Monmouth County	Manasquan Reservoir, Howell
10:00 a.m 4:00 p.m.	Essex County Master Gardeners Plant Sale	Presby Memorial Iris Gardens, Montclair
11:00 a.m 12:00 p.m.	Terrarium Building	Calgo Gardens, Freehold
3:00 - 5:00 p.m.	A Meadows Afternoon	South Cape May Meadows, Cape May

7:15 - 10:15 or 7:30 - 10:30 a.m.	Belleplain Hotspots	State Forest, Woodbine	
7:30 - 8:30 a.m.	From Dawn to Dusk	Freneau Woods Park, Aberdeen	
7:30 - 9:30 a.m.	Spring Birding	Garrett Family Preserve, Cape May	
8:00 - 9:00 a.m.	Spring Migration Bird Walk	Lorrimer Sanctuary, Franklin Lakes	
8:00 - 9:00 a.m.	Morning Walk	Scherman Hoffman Wildlife Sanctuary, Bernardsville	
8:00 - 11:00 a.m.	Birding	South Mountain Reservation, West Orange	
8:00 a.m 5:00 p.m.	Spring Weekend Bird Excursion	Thompson Park, Lincroft	
8:30 - 10:30 a.m.	Spring Bird Walk	Palmyra Cove Nature Park, Palmyra	
8:45 a.m 1:30 p.m.	Birding	Sandy Hook, Middletown	
9:00 a.m 3:00 p.m.	Essex County Master Gardeners Plant Sale	Presby Memorial Iris Gardens, Montclair	
9:30 - 11:30 a.m.	Basics for Creating a Flower Bed	Deep Cut Gardens, Middletown	
10:00 - 11:30 a.m.	Native Plant Walk	Lorrimer Sanctuary, Franklin Lakes	
10:00 a.m 12:00 p.m.	Unique Trees	Haverford College Arboretum, Haverford	
10:00 a.m 12:30 p.m.	Back Bay Birding by Boat on the Osprey	Miss Chris Marina, Cape May	
10:00 a.m 4:00 p.m.	Art in the Garden	Calgo Gardens, Freehold	

10:00 a.m 4:00 p.m.	Nature Festival	al Cattus Island Park, Toms River	
10:30 a.m. or 1:30 p.m.	Guided Tour	Reeves-Reed Arboretum, Summit	
1:00 p.m.	Nursery Shopping Tour	Hardy Plant Society/Mid-Atlantic Group, Lancaster County, Pennsylvania	
1:00 - 3:00 p.m.	Tea Farm Tour	Cumberland County Master Gardeners, Greenwich	
1:00 - 3:00 p.m.	Sustainable Self-Care Saturday	Snug Harbor Cultural Center and Botanic Garden, Staten Island, New York	
1:00 - 3:30 p.m.	Agriculture and Land Preservation	Rancocas Creek Farm, Southampton	
2:30 - 3:30 p.m.	Compost Turn and Learn	Snug Harbor Cultural Center and Botanical Garden, Staten Island, New York	
3:00 - 5:00 p.m.	Bird Walk for All People	State Park, Cape May Point	

Lots to do in the garden this month (courtesy of the New York Botanical Garden):

Complete the setting out of deciduous trees and shrubs before new leaf buds expand, except for magnolias, which should wait for May.

Install evergreen trees and shrubs before new growth is much advanced.

If dormant roses were not planted early in the month, plant only container-grown specimens.

Plant perennials.

Late summer and fall-flowering perennials (e.g., phlox, asters, boltonias, physostegias, chrysanthemums, heleniums) may be divided and replanted now; early-flowering varieties should wait until later in the season.

If hellebores absolutely must be moved or divided, do so after flowering is finished and just as new growth begins, but be warned – they won't like it.

Gladioli, montbretias and galtonias may be planted now.

Top-dress alpines with appropriate soil – humus-rich for woodland varieties, peaty for acid-lovers, soil with limestone chips for those needing a high pH.

Direct sow all but the tenderest annuals outdoors.

Direct sow all the hardier vegetables outside, but it is still too early for beans, corn and tropicals.

Move houseplants, such as African violets, ferns and pickaback plants, that prefer subdued lighting to areas where they will not be exposed to full, midday sun.

An Iconic Exotic

It may seem that nothing can eclipse the horror that the 24-hour news cycle has become, dominated as it is by the Russian assault on the Ukraine, and no effort at distraction should be seen as an attempt to make light of it. It is with some consternation, then, that you may discover that a botanical icon of the American West is a Russian invader, which has spread to every state in the Union save Alaska.

Prickly Russain thistle, a.k.a. windwitch, prickly glasswort and common saltwort, is the very tumbleweed that blows across arid and semi-arid landscapes and movie screens. Native to those regions of southeastern Europe and Central Asia, it was introduced to the United States in the late nineteenth century through a contaminated shipment of flax seeds to South Dakota. Thence, transcontinental rail traffic quickly spread it via a contaminated cattle car to California, and prevailing westerly winds did the rest in a matter of mere decades in one of the swiftest unintentional distributions ever.

Salsola tragus was known by over 55 different scientific names until the Nomenclatural Committee of the 2017 XIX International Botanical Congress settled on it. It is now a member of the subfamily Salsoloideae in the amaranth family, Amaranthaceae. Because it is known to hybridize with other Salsola species and because it appears to present with a wide morphological variety, there are those botanists who suspect that it represents three separate species, as yet undesignated.

A warm season, annual forb, *S. tragus* grows up to three feet tall and six feet in diameter in a rounded mound with opposite branched stems, usually striated in red or purple. As a seedling, its leaves are alternate and needle-like. As they reach one to two inches long, they become fleshy, dark green and narrow and, when mature, stiff and sharply spined on the ends. The small, inconspicuous inflorescences borne in leaf axils are bisexual and consist of three to five anthers and a short style branching into two stigmas. The

perianth consists of five undifferentiated lobes measuring less than one tenth of an inch and three rigid, sharp bracts. The fruit is a tightly coiled embryo covered only with a thin membrane -- there is no stored energy or heavy seedcoat. As unusual as that may be, what makes a tumbleweed a tumbleweed is a set of specialized abscission cells that break off the plant at the base at the end of the season. The upper part then tumbles freely in the wind, scattering its seeds, along with western nostagia, as it goes.

If a record-breaking history of dispersal indicates an unusually successful invader, the tumbleweed has many adaptions that would offer an explanation. While the tumbling plant may give an appearance of rootlessness, tumbleweed can generate a six foot taproot and five foot lateral roots to reach subsurface moisture that is unavailable to other plants, so it can colonize areas that would desiccate competitors. It can thrive at almost any altitude, from below sea level to 8500 feet, in any habitat, from Desert Scrub to Alpine, and, as indicated by its genus name, it is also tolerant of saline as well as alkaline soils. The spininess of the mature plant wards off predators at a time when the annual plant's focus shifts from mere survival to reproduction.

S. tragus is also a particularly successful nutrient producer, in that, like most amaranths, it employs a C4 photosynthesis, a more efficient means of food production than that of most others. In the more common C3 photosynthesis, plants take in CO₂, which undergoes carboxylation and oxygenation in a reaction precipitated by an enzyme known as RuBisCo* The oxygenated RuBisCo is unusable by the plant, and thus producing it is a waste of energy. In C4 carbon fixation, the plant uses two different types of foliar cells: mesophyll cells, which take in CO₂ and produce oxaloacetic acid in a reaction with the carboxylase PEP* enzyme, whose metabolites are transmitted to bundle-sheath cells, where they are decarboxylated to concentrate the CO₂**. This allows higher rates of photosynthesis at higher temperatures. Moreover, the higher concentration of CO₂ leads to lower stomatal conductance***, which reduces water loss and contributes to the high water efficiency of these plants.

Of course, the speed and the extensive spread of tumbleweed's distribution indicates a high level of reproductive success. Start with the flowers: inconspicuous as they are, they attract a wide range of pollinators, including wasps, bees, moths butterflies and even flies. Moreover, the plants are highly prolific -- large ones can yield over 250,000 seeds. But, the true key to the tumbleweed's success is the tumbling, which disperses seeds over miles at a time. While fresh seed needs temperatures of at least 68° to germinate, after overwintering, it can germinate in any temperature as long as the seed can detect a small

amount of moisture. It then uncoils within minutes and can send down its taproot within twelve hours. If it dries out before uncoiling, it can return to dormancy.

The question then arises as to why such a prolific colonizer has failed to take over the world. For all its advantages, tumbleweed has several drawbacks that serve somewhat to check its spread.

It is tempting to think of a plant that thrives in inhospitable conditions as one that has superior adaptability. In many cases, however, it is not so much a plant that can *even* thrive there, but a plant that can *only* thrive there, not because it cannot use better water, sun or fertility, but because it cannot compete with other plants that can thrive more successfully when their minimum conditions are met.

The tumbleweed's energetic embryo requires loose, well drained soil. It cannot penetrate firm soil, so it more often relies on soil that has been distrubed and often abandoned. If planted in a tilled garden, on the other hand, it is a poor competitor. It is not tolerant of shade, so that, despite its early start, nearby plants that grow taller or to its south can rapidly cause it to fail. Finally, although vast amounts of seeds are produced, a large amount fail to germinate in the first year, and virtually none germinate in the second.

Tumbleweed does have is practical uses. Its water efficiency makes it a good emergency source of hay. It provides shelter for small animals -- mammals, birds and reptiles -- and forage for bison, deer, pronghorn and prairie dogs. In a partially degraded landscape, its spines can protect struggling native plants from grazing herbivores. Its immature shoots are edible and its seeds are high in fiber. During the dustbowl years, it saved livestock and people; however, as it matures, it produces increasing amounts of oxalates, which make phosphorus more available to other plants, but can become toxic to people and sheep -- cattle are usually too large to be affected by the amounts in tumbleweed. Because tumbleweed skeletons do not readily rot, there is also a small, niche craft market for them.

In a seemingly ironic twist, tumbleweeds are also valuable in landscape restoration. Mycorrhizal fungi, which colonize the roots of most plants, exist in a symbiotic relationship that makes water and nutrients, especially phosphorus, more available to those plants. However, rather than enter into such a relationship with tumbleweed, mycorrhizal fungi prey on them and often kill them, thus increasing the amount of mycorrhizal fungi, which can then channel the increased phosphorus to the plants that they colonize.

Like all *Salsolas*, tumbleweed accumulates salts in sodium-rich soils and was used in soap and glass making until the nineteenth century. The method, which remained unchanged for at least 4600 years, involved burning the plants, mixing the ashes with water to yield a solution of sodium carbonate, known to us as washing soda, and then boiling off the water. To make glass, the residue was mixed with sand to reduce its melting point, and, to make soap, its residue was mixed with oil or fat.

While the USDA has issued a tumbleweed fact sheet that includes instructions for planting, there is no commercial market for seeds, and for good reason. The overwhelming assessment of tumbleweed is as a noxious pest. Although it does not compete well with undisturbed natives, plowed fields are quite hospitable. Even if the tumbleweed could later be shaded out, its indifference to temperature and habitat gives it an early start that can deplete the water that would otherwise have been available to later crops. It also serves as a host for the beet leafhopper, *Circulifer tenellus*, the only known vector for beet curly top geminivirus, which is responsible for enormous crop losses. Sugar beets are the principal hosts, yet over 300 other species are affected. Once transmitted, the virus kills seedlings, sickens plants and ruins fruits.

Tumbleweed's biggest drawback, however, is neither pathogenic nor chemical — it is physical. In its environments inhospitable to other plants, it can quickly proliferate to overwhelm the landscape, to the extent that it can affect wind currents and the dispersal of native seeds. The skeletons, which can last up to a year, can quickly pile up against any barriers to clog irrigation ditches, block and knock over fences and even bury houses. If not blocked, it can blow onto highways where it can act like drifting snow. In one incident, later termed "Tumblegeddon," on New Year's Eve, 2019 in Wahsington State, a 300 yard section of traveled highway was covered in tumbleweeds to a height in some places of thirty feet. It took hours to free trapped motorists and fully ten hours for snow plows to clear the road. Tumbleweeds are also fire hazards. Occurring as they do in arid areas prone to fire, once ignited, their ability to spread seeds far and wide allows them to spread conflagrations as they blow over fire breaks and cut swaths through grasslands.

Although known to be present in New Jersey, it is unlikely that tumbleweed will invade an area as mesic and built-up as ours. Nonetheless, if some should take root, there are ways to control it: minimize disturbance of the soil, plant competing vegetation and practice no-till horticulture. (See *The Vine*, December, 2019 for details.)

^{*} It is too long and complicated for even chemists to want to pronounce.

- ** Two more steps are needed to complete photosynthesis beyond the reduction of oxygenation or photorespiration. If all this seems like a lot of additional energy use, it is, but the increase in photosynthetic efficiency outweighs it.
- *** Stomatal conductance is the net CO₂ entering or water vapor leaving through the leaf pores for a specific difference in concentration between the atmosphere and the substomatal cavity of the leaf. The high concentration of CO₂ across the stomatal pores reduces the difference between the leaf's atmosphere and substomatal cavity; thus, the stomata open less and lose less water.

Season's Eatings:

PB&J Hamantashen (About 2 dozen)

2 tbsp. butter
1/2 cup peanut butter
2/3 cup sugar
1 egg
2 tbsp. milk
1 tsp. vanilla
1/2 tsp. baking powder
1 1/2 cups flour plus more for hands
approx. 1/2 cup fig spread or other thick jam or preserve cooking spray

Cream butter, peanut butter, and sugar together, beat in egg, milk, and vanilla, sift in baking powder and flour, stir well to combine, but do not beat, and chill at least 15 minutes. Scoop up walnut-size piece of dough, roll into ball, flatten to about 1/4-1/2" thick round and place on cookie sheet sprayed with cooking spray. Repeat with remaining dough until cookie sheet is full -- no need to leave a space between the rounds, as long as they are not touching. Place about 1 rounded tsp. of fig spread in center of one round of dough, fold sides of dough into center without covering fig spread or allowing it to overflow, and fold up bottom. Repeat with remaining rounds of dough. Bake at 375° for about 10 minutes until golden brown, and cool on rack.