



Bringing Native Plants into NC Coastal Landscapes: Perspectives from Nursery & Landscaping Professionals

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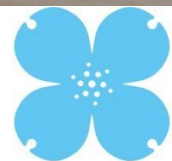
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How can we increase nature-enhancing landscaping in coastal communities with easy, available, affordable, attractive solutions?



THE UNC
SYSTEM



NORTH CAROLINA
BOTANICAL
GARDEN



NORTH CAROLINA
NATIVE PLANT
SOCIETY



NC COOPERATIVE
EXTENSION

N.C. native plant survey conducted in fall 2021

- Purpose was to learn from growers what type of N.C. native plants they currently grow and, with adequate demand, which types they would grow
- Focus on supply of coastal native plants, esp. plants featured in Coastal Landscapes Initiative guides and designs

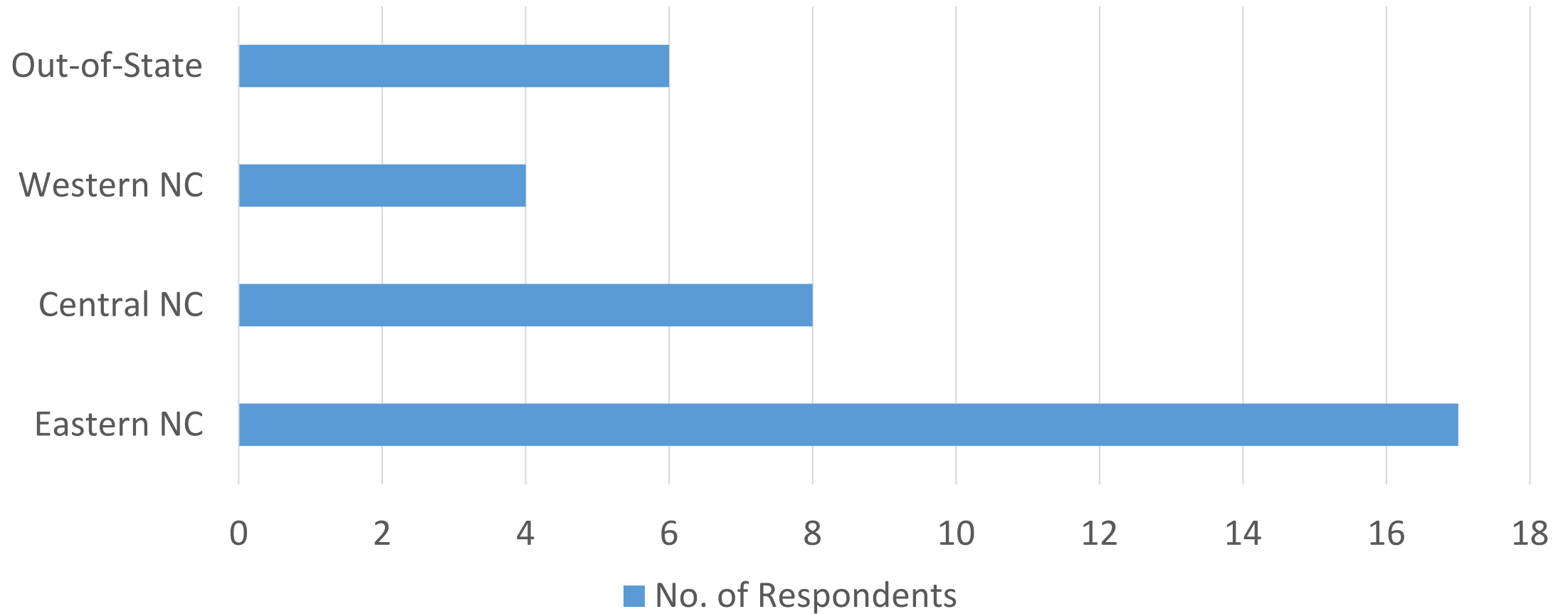


20 N.C. growers participated in the online survey

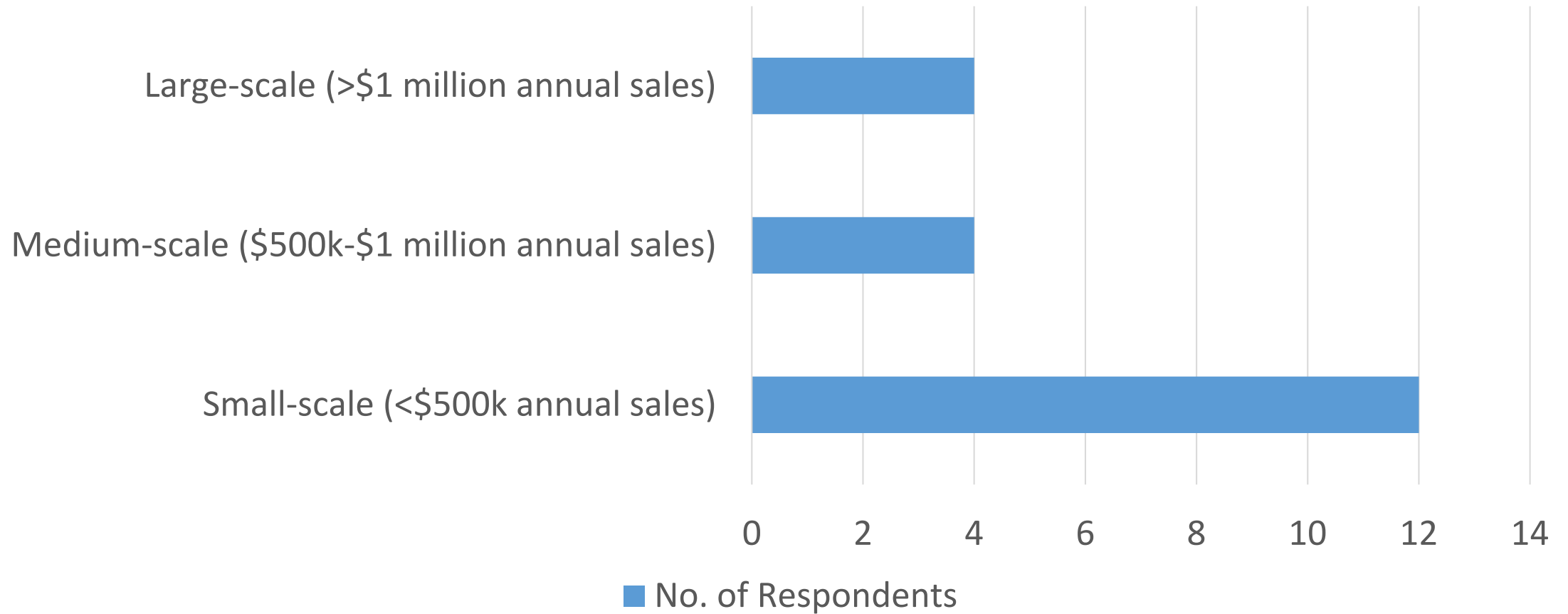
- Growers identified by NCDA&CS License Search page
- Certified (>1 acre) and registered (>=1 acre) nurseries in all 20 coastal counties were contacted by phone and email
- Eastern NC nurseries also received notice of the survey via Danny Lauderdale's (NC State Extension) monthly nursery newsletter

County, Region where plants are grown	No. of Respondents
Beaufort, Coastal	1
Bertie, Coastal	1
Brunswick, Coastal	2
Chowan, Coastal	1
Currituck, Coastal	1
Gates, Coastal	1
Johnston, Coastal	1
Mitchell, Mountains	1
Nash, Coastal	1
New Hanover, Coastal	3
Vance, Piedmont	1

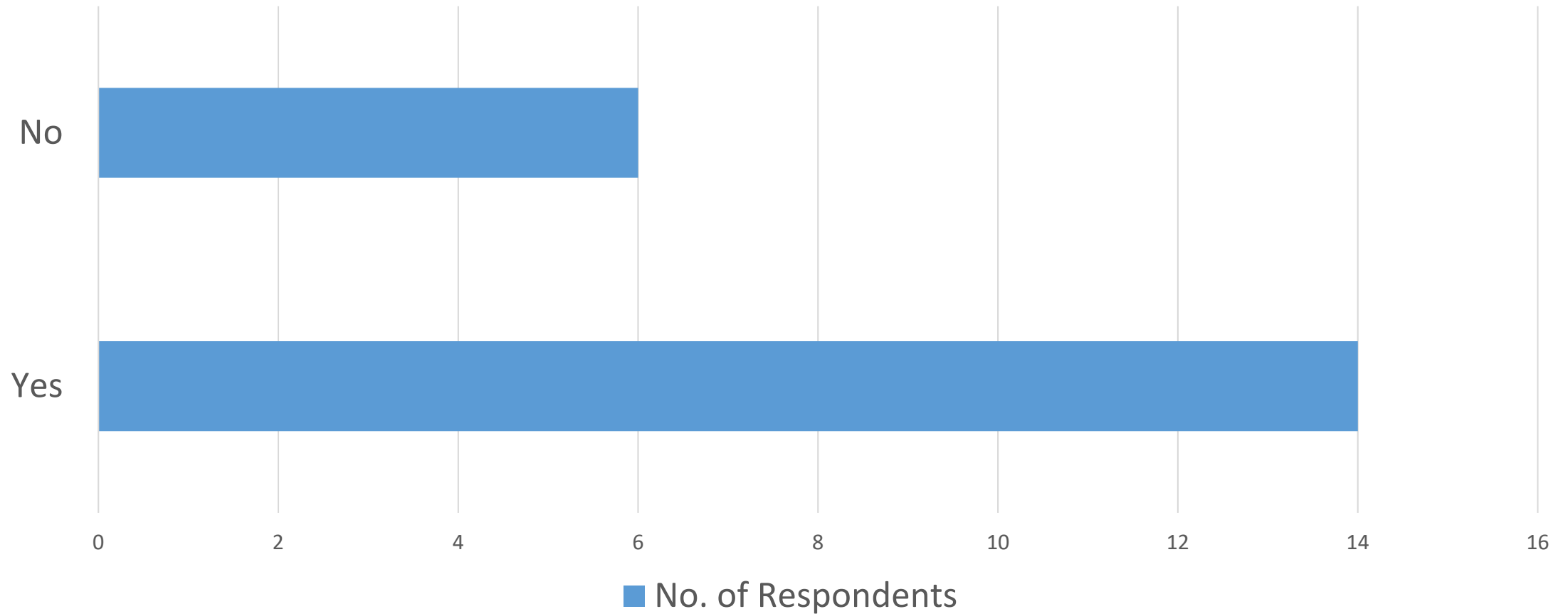
Locations of retail nurseries where growers sell their plants



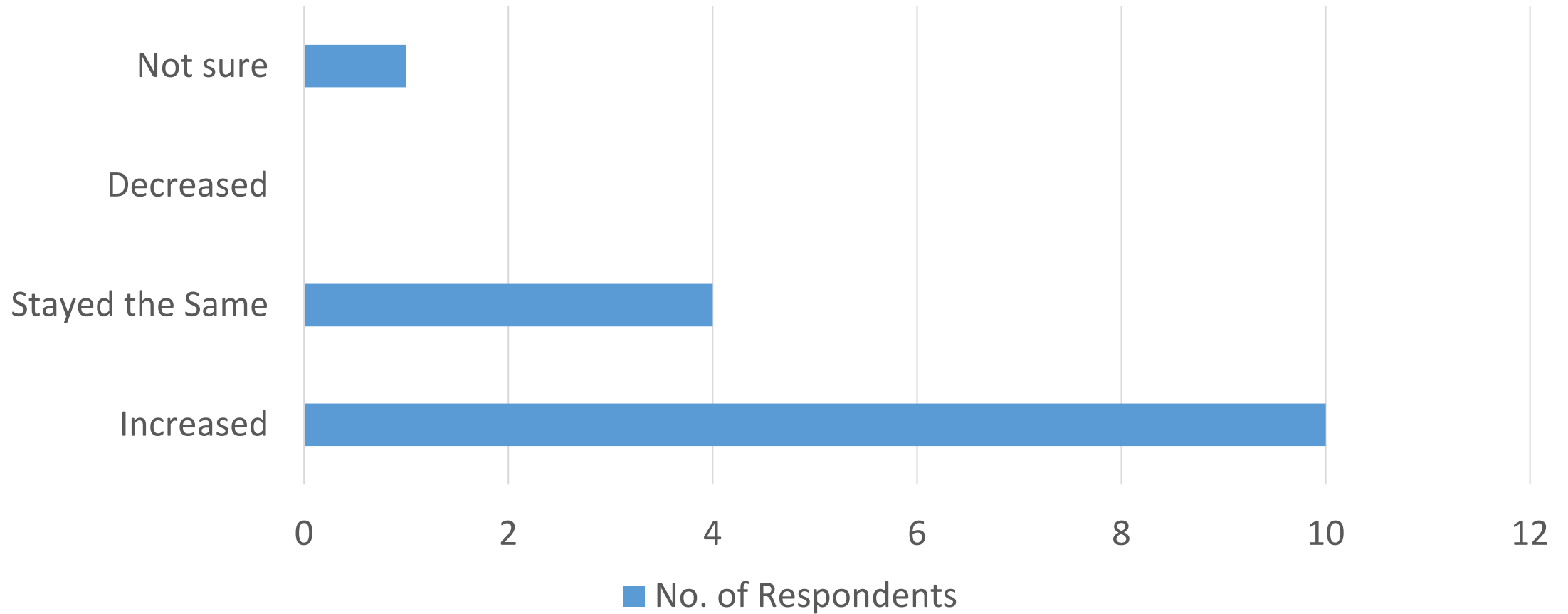
Size of plant growing business



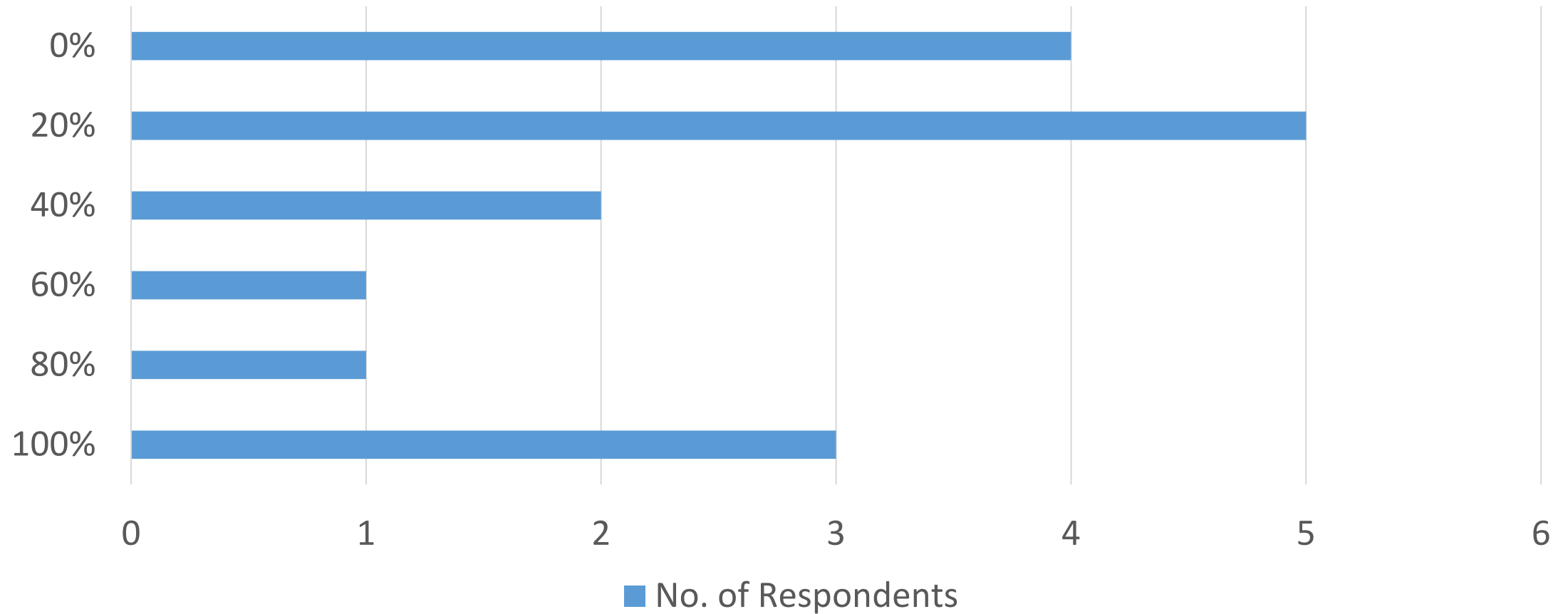
Number of respondents that buy plugs, liners or other types of plant starts from other growers



How demand for native plants has changed in the last 5 years



Percentage of total plants sales that are plants native to North Carolina



TOP 5 NATIVES SOLD

WAX MYRTLE

HOLLY OAK

VIRGINIA SWEETSPIRE

PINK MUHLY GRASS MILKWEED

RIVER BIRCH DOGWOOD

JOE PYE WEED

PICKERELWEED

GREEN ARROW ARUM

SOFTSTEM BULRUSH

PALM

RUSH

ARBORVITAE

SWEET PEPPERBUSH

BLACK-EYED SUSAN

IRIS

CARDINAL FLOWER

MONARDA

BEECH

CEDAR

REDBUD

INKBERRY

BALD CYPRESS

LITTLE BLUESTEM

STOKES ASTER



SOUTHERN WAX MYRTLE

Morella cerifera

A common semi-evergreen shrub that shows up in most Carolina coastal habitats, from the landward edge of dunes to the upper edge of tidal marshes. Its leathery, waxy, olive green leaves smell spicy when crushed. Plants are either male or female. In the winter, pollinated female plants give rise to globular, gray-blue berries. Colonists used the fruit to make candles by boiling them and separating the waxy coating. Seeds are a food source for various songbirds, including Carolina wrens, tree swallows and migratory warblers. Useful as a screen or a hedge, southern wax myrtle bounces back quickly after storms, with broken branches resprouting and releafing within weeks.

HIGHLIGHTS – ATTRACTS BIRDS & BUTTERFLIES
– POLLINATOR-FRIENDLY

LIGHT EXPOSURE – FULL SUN TO PART SHADE

SOIL – DRY TO WET

HEIGHT & WIDTH – H: 6' - 12' W: 10' - 20'

FORM – MULTI-TRUNK

SALT TOLERANCE – HIGH

ZONE – 7 - 10





SWAMP CHESTNUT OAK

Quercus michauxii

A deciduous tree found in bottomland forests that periodically flood throughout the lower piedmont and coastal regions of North Carolina. Its smooth leaves are somewhat oval, with numerous shallow lobes or rounded teeth along the edges. Their undersides are softly hairy. In autumn, foliage erupts in a showy display. Spring flowers give way to acorns consumed by various birds and other wildlife, including chipmunks. The tree also serves as a larval host of numerous butterflies, such as the banded hairstreak and Horace's duskywing, as well as many moths. Swamp chestnut oak was a popular timber tree in the cotton-growing regions of the South because of its durable wood. The wood also provided fiber for weaving heavy baskets used to harvest cotton.

HIGHLIGHTS – ATTRACTS BIRDS & BUTTERFLIES
– WILDLIFE HABITAT

LIGHT EXPOSURE – FULL SUN

SOIL – DRY TO WET

HEIGHT & WIDTH – H: 60' - 80' W: 50' - 70'

FORM – CONICAL IN YOUTH; ROUND CROWN

SALT TOLERANCE – LOW

ZONE – 5 - 8





SPOTTED HORSEMINT

Monarda punctata

A short-lived perennial with aromatic leaves found in dunes and dry, sandy woods and fields. Purple dots speckle its pale yellow flowers, which emerge in mid-summer and grow in tight whorls at the top of the plant. Attractive lavender, pink or white leaf-like structures called bracts encircle the captivating blooms. The nectar and pollen attract hummingbirds, butterflies, honey bees, bumblebees, miner bees and plasterer bees. Spotted horsemint contains an essential oil called thymol, used as an antiseptic in some mouthwashes, and Native Americans drank tea made from its leaves to treat colds, fever and flu. Also known as bee balm, this plant is well-suited to various types of gardens, including cottage, container, herb and butterfly gardens. It is unpalatable to deer, rabbits and other herbivores.

- HIGHLIGHTS**
- ATTRACTS BIRDS & BUTTERFLIES
 - DROUGHT-TOLERANT
 - POLLINATOR-FRIENDLY

LIGHT EXPOSURE – FULL SUN TO PART SHADE

SOIL – DRY TO MOIST

HEIGHT & WIDTH – H: 2'- 3' W: 2'- 3'

BLOOM TIME – SUMMER TO AUTUMN

SALT TOLERANCE – MODERATE

ZONE – 3 - 8



IF DEMAND INCREASED, TOP 5 NATIVES TO GROW

GRASSES

AMERICAN BUR REED
AMERICAN HONEYSUCKLE
AMERICAN WATER PLANTAIN
BUTTERFLYWEED
CAROLINA ALL SPICE
CLETHRA
CULVER'S ROOT

DOGWOOD
EASTERN RED CEDAR
HOLLY
INKBERRY
LIVE OAK

MAXIMILLIAN SUNFLOWER
RUBY SPICE
SERVICEBERRY
SPICEBUSH
TOOTHACHE TREE
WAX MYRTLE
WITCH HAZEL
YAUPON HOLLY



Sally/ Andy Wasowski, LB/JWC

LITTLE BLUESTEM

Schizachyrium scoparium

A perennial grass that tolerates high heat and humidity, and is therefore well-adapted to southern climates. Its blue-green leaves turn yellow-orange in autumn, making for an attractive planting. Showy in mass plantings, it also makes an ideal addition to a rain garden. The species is a larval host of various skipper butterfly species. Cut back little bluestem to the ground in early spring to promote new, attractive growth.

HIGHLIGHTS – DROUGHT-TOLERANT
– AUTUMN INTEREST

LIGHT EXPOSURE – FULL SUN

SOIL – MOIST TO WET

HEIGHT & WIDTH – H: 2' - 4' W: 2' - 4'

FORM – UPRIGHT CLUMPING

SALT TOLERANCE – HIGH

ZONE – 3 - 9



Norman G. Flagg, LB/JWC



Tom Potterfield, CC BY-SA-2.0



Joshua Mayer, CC BY-SA-2.0 DE



plantsforpermaculture, CC BY 2.0

EASTERN RED CEDAR

Juniperus virginiana

A dense, fast-growing, evergreen conifer with scale-like foliage found in forests or disturbed areas in fields and pastures and along fence rows. Its bark peels off in thin, shreddy strips that are collected by birds as nesting material. Female trees produce bluish, berry-like cones that ripen in autumn and provide nourishment for songbirds and small mammals. Eastern red cedar also provides winter cover to wildlife and is the larval host of the juniper hairstreak butterfly. Its aromatic heartwood is commonly used for cedar chests. Suitable as a windscreen or buffer, this tough tree also boasts the best drought resistance of any conifer native to the eastern U.S. A smaller relative, the southern coastal red cedar (variety *silicicola*), found near ocean dunes, is significantly more tolerant of salt spray. *Silicicola* is harder to find in nurseries, however, apart from the "Brodie" cultivar.

HIGHLIGHTS – ATTRACTS BIRDS & BUTTERFLIES
 – PEST-RESISTANT
 – WILDLIFE HABITAT

LIGHT EXPOSURE – FULL SUN TO PART SHADE

SOIL – DRY TO MOIST

HEIGHT & WIDTH – H: 30' - 40' W: 10' - 20'

FORM – UPRIGHT; DENSELY PYRAMIDAL

SALT TOLERANCE – MODERATE

ZONE – 2 - 9



CameliaTWU, CC BY-NC-ND 2.0



Janet and Phil, CC BY-NC-ND 2.0



Nicholas A. Tonelli, CC BY 2.0



Scott Zona, CC BY 2.0

YAUPON HOLLY

Ilex vomitoria

An evergreen shrub or small tree native to sandy woods, brackish and tidal marsh shorelines, dunes, maritime forests and shrub thickets. Plants are either male or female. On pollinated female plants, small, white, fragrant flowers give way to red berries that provide sustenance to songbirds and small mammals. Though toxic to humans, the bright fruit adds pizzazz to holiday decor. Yaupon holly is the source of a concentrated drink that Native Americans made to reportedly cleanse the body, hence its scientific name. Browned and dried leaves can also be steeped in hot water to brew a caffeinated tea. This species has been known to tolerate flooded conditions for extended periods of time.

HIGHLIGHTS – ATTRACTS BIRDS & BUTTERFLIES
– PEST-RESISTANT

LIGHT EXPOSURE – FULL SUN TO PART SHADE

SOIL – DRY TO WET

HEIGHT & WIDTH – H: 10' - 20' W: 8' - 12'

FORM – UPRIGHT & MULTI-STEMMED

SALT TOLERANCE – HIGH

ZONE – 7 - 9



Camelia TWU, CC BY-NC-SA 2.0

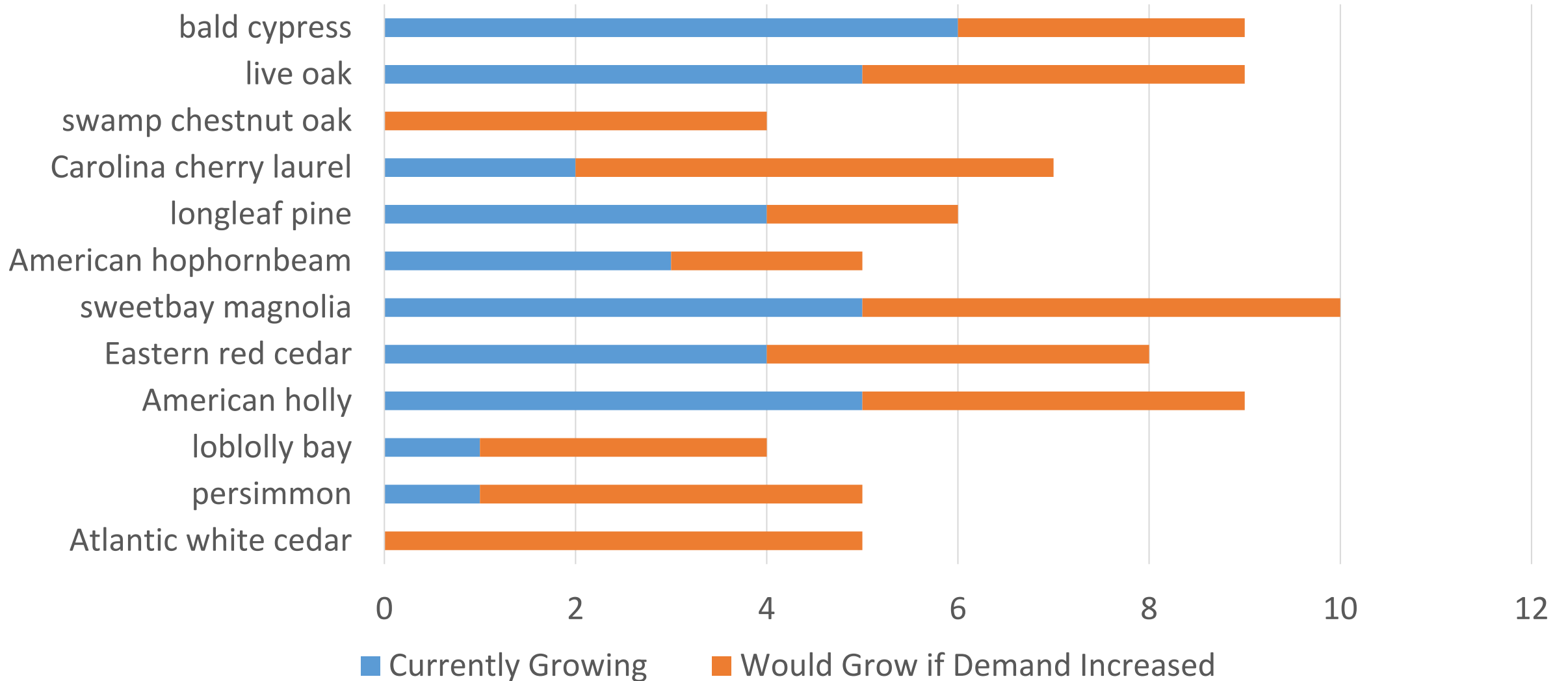


Mary Keim, CC BY-NC-SA 2.0



Will Cook, Carolina Nature

No. of respondents that currently grow or would grow this **tree** if demand increased



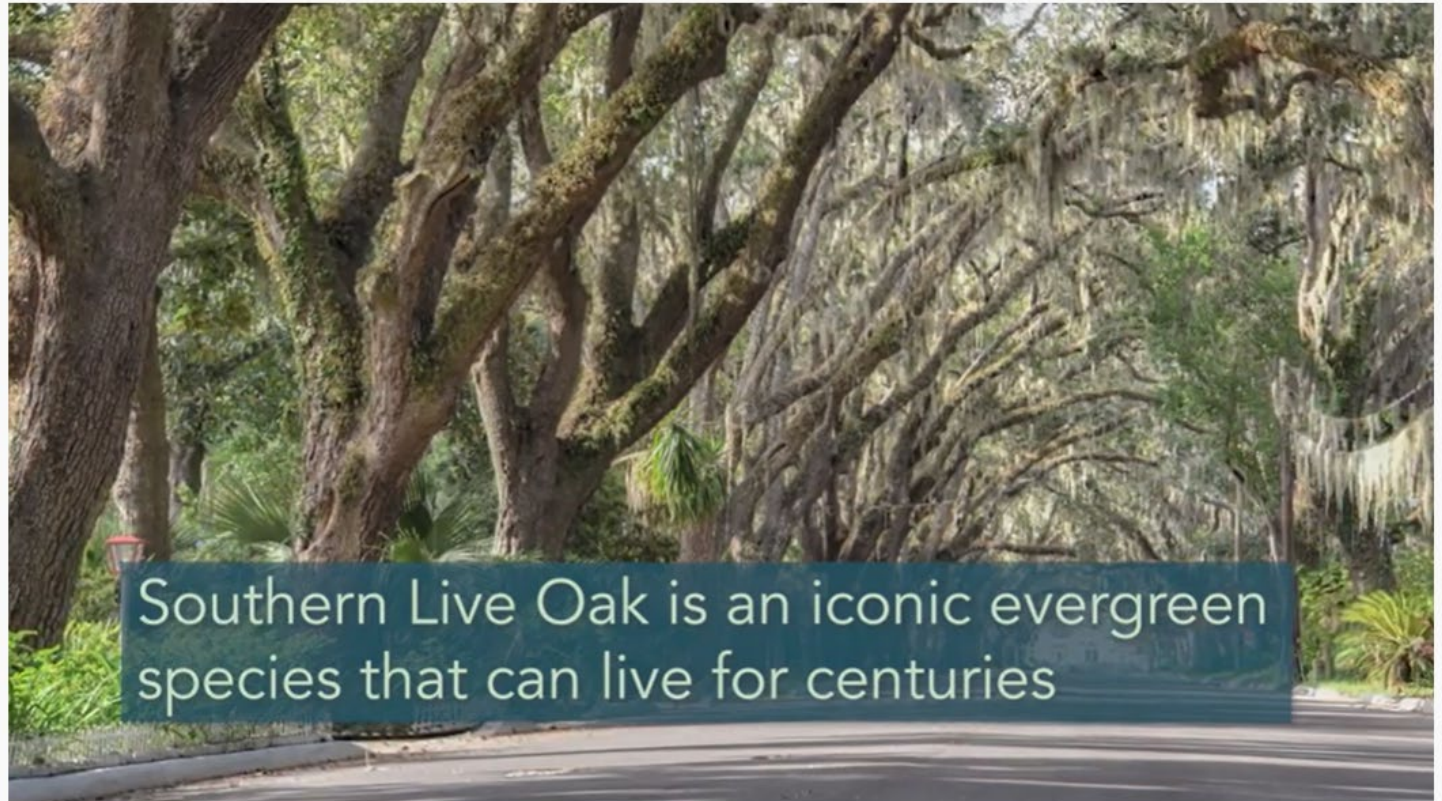
N.C. Native Plant Pick: Southern Live Oak

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native-plant-pick



YouTube

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NC Native Plant Pick: Southern Live Oak

85 views • Nov 2, 2021



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DISLIKE



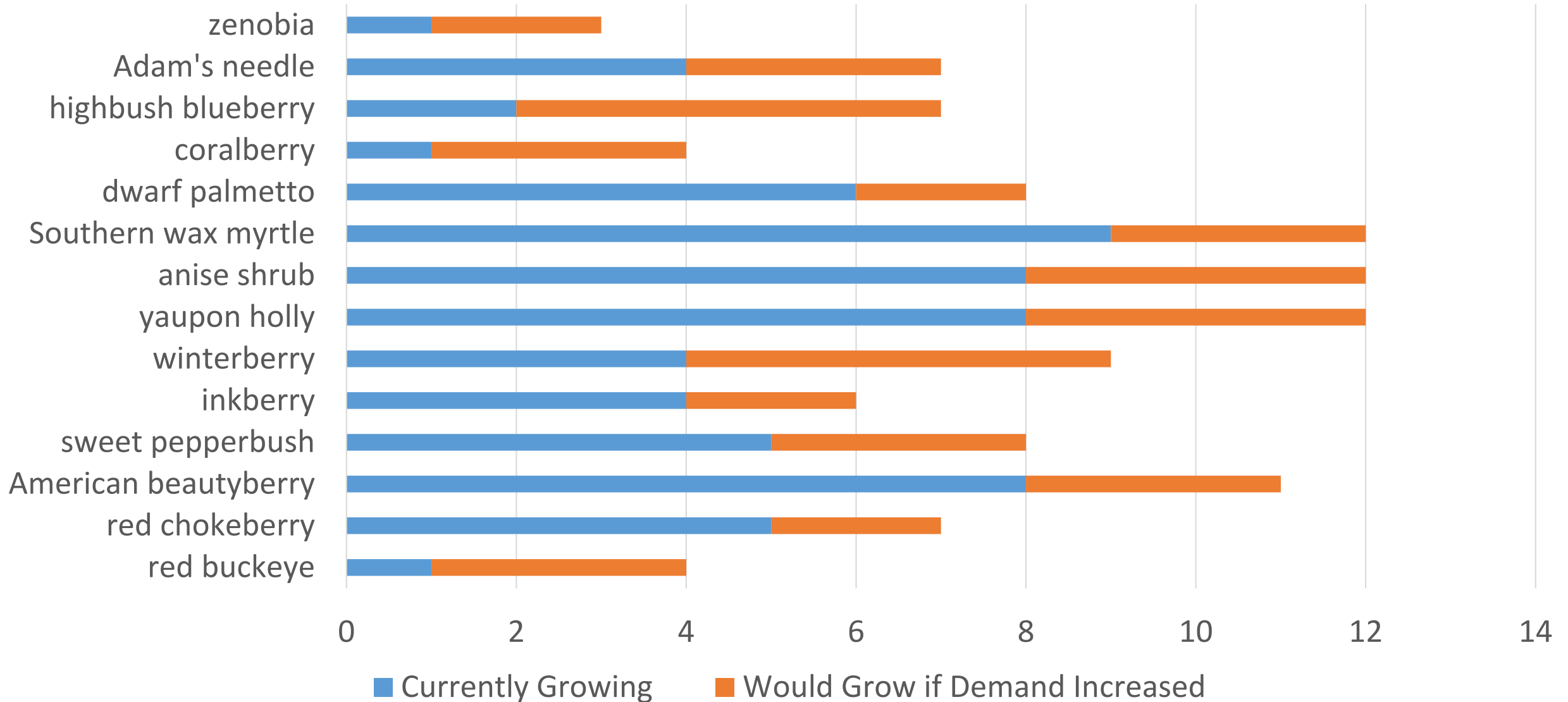
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No. of respondents that currently grow or would grow this **shrub** if demand increased



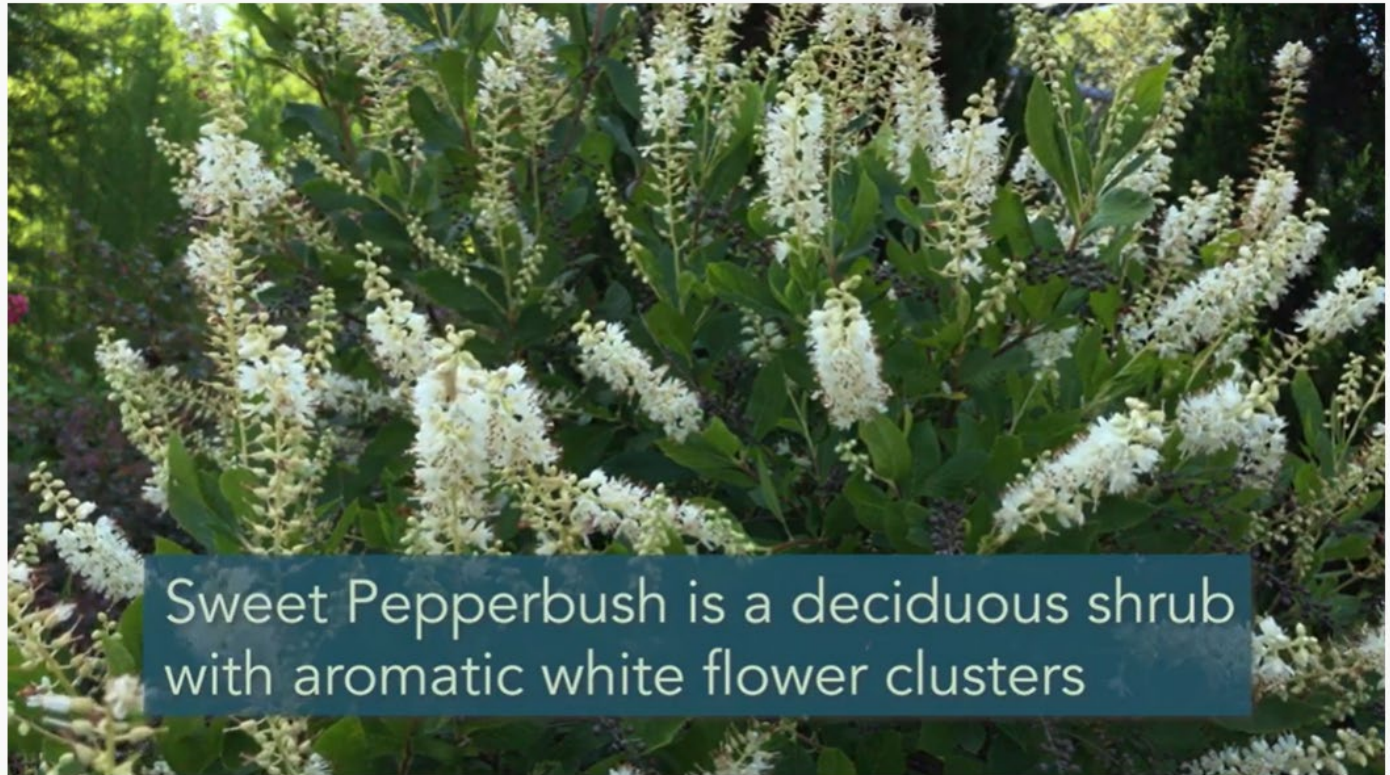
N.C. Native Plant Pick: Sweet pepperbush

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Sweet Pepperbush is a deciduous shrub
with aromatic white flower clusters

N.C. Native Plant Pick: Sweet Pepperbush

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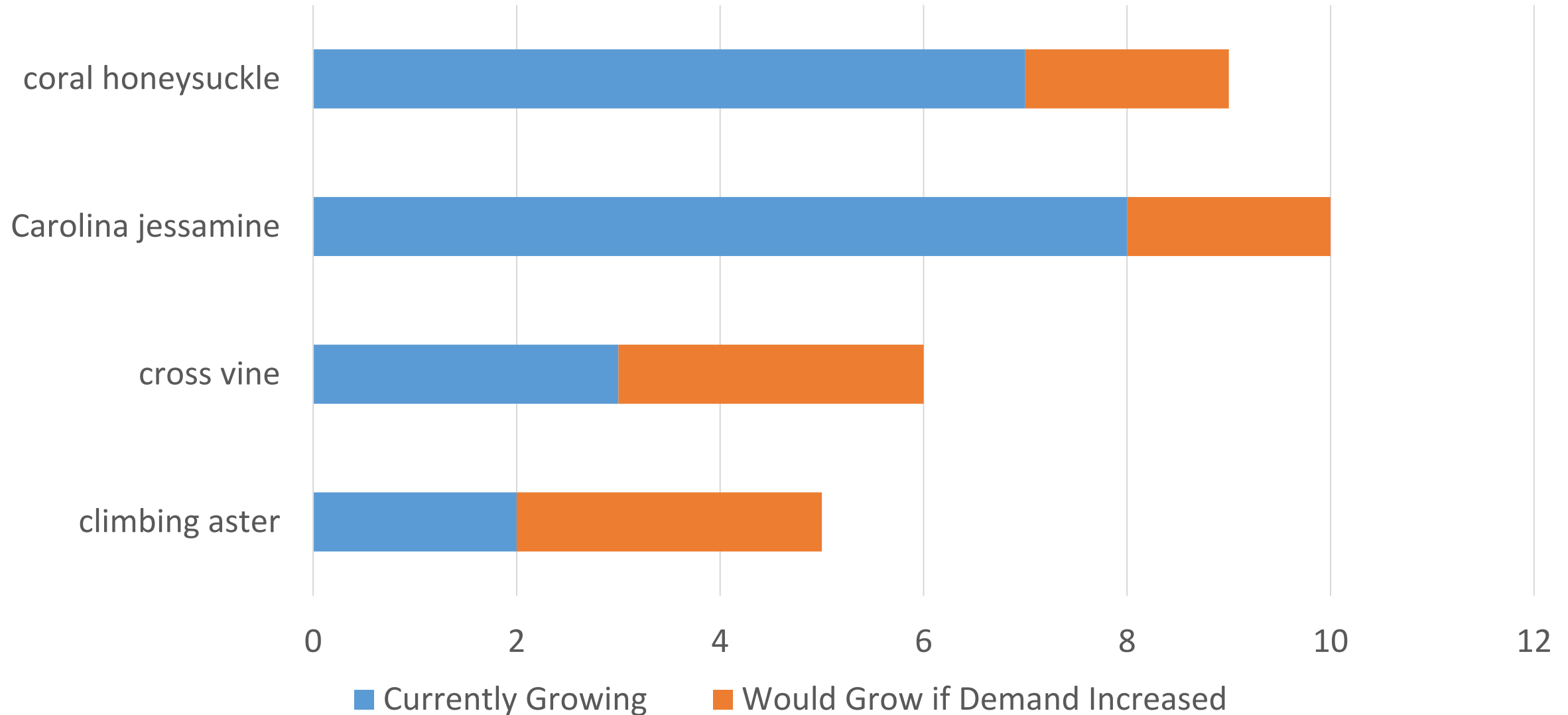
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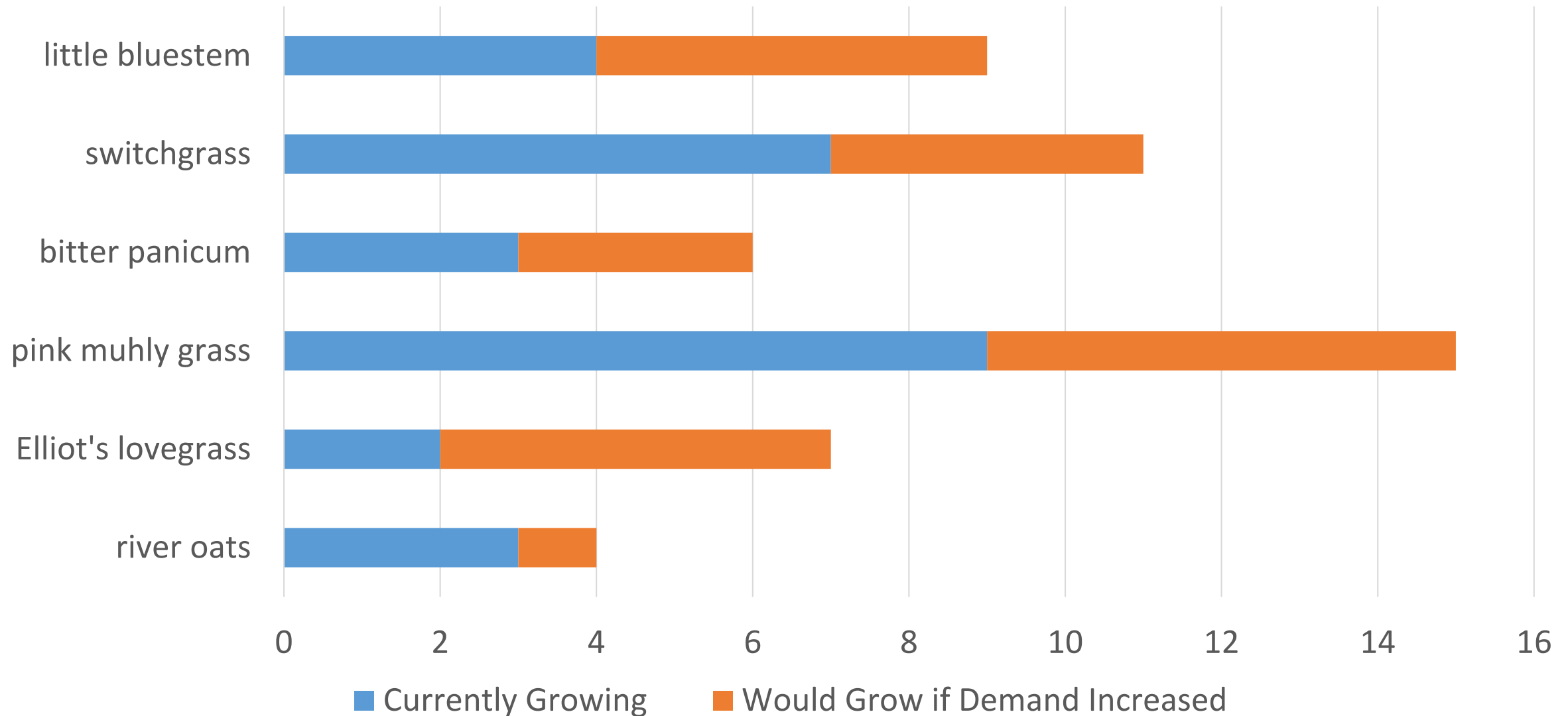
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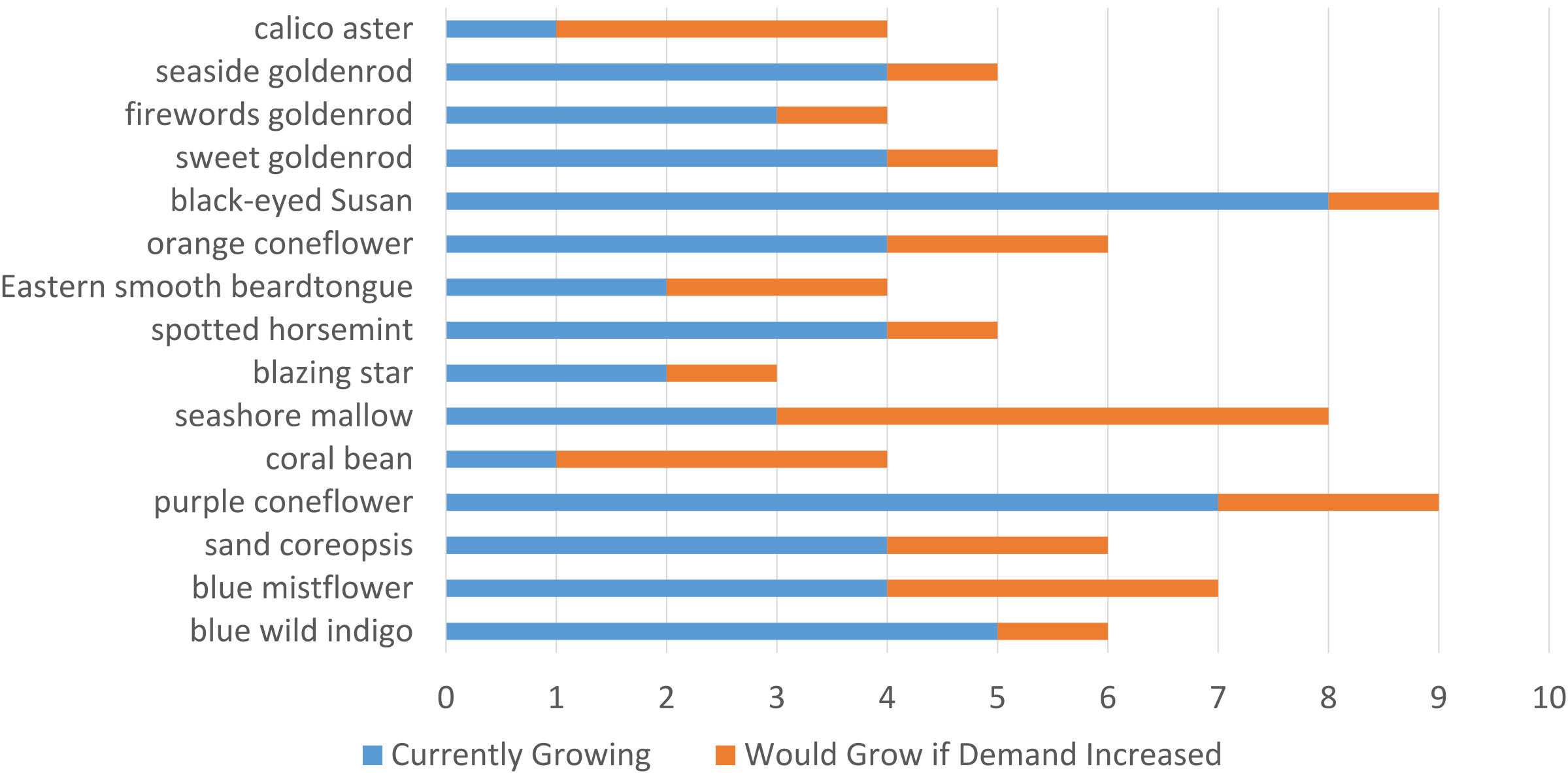
No. of respondents that currently grow or would grow this **vine** if demand increased



No. of respondents that currently grow or would grow this **grass** if demand increased



No. of respondents that currently grow or would grow this **flowering perennial** if demand increased



N.C. Native Plant Pick: Goldenrods

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Goldenrods are as ecologically beneficial as they are beautiful, boasting autumn flowers in sunny shades

NC Native Plant Pick: Goldenrods

35 views • Nov 2, 2021



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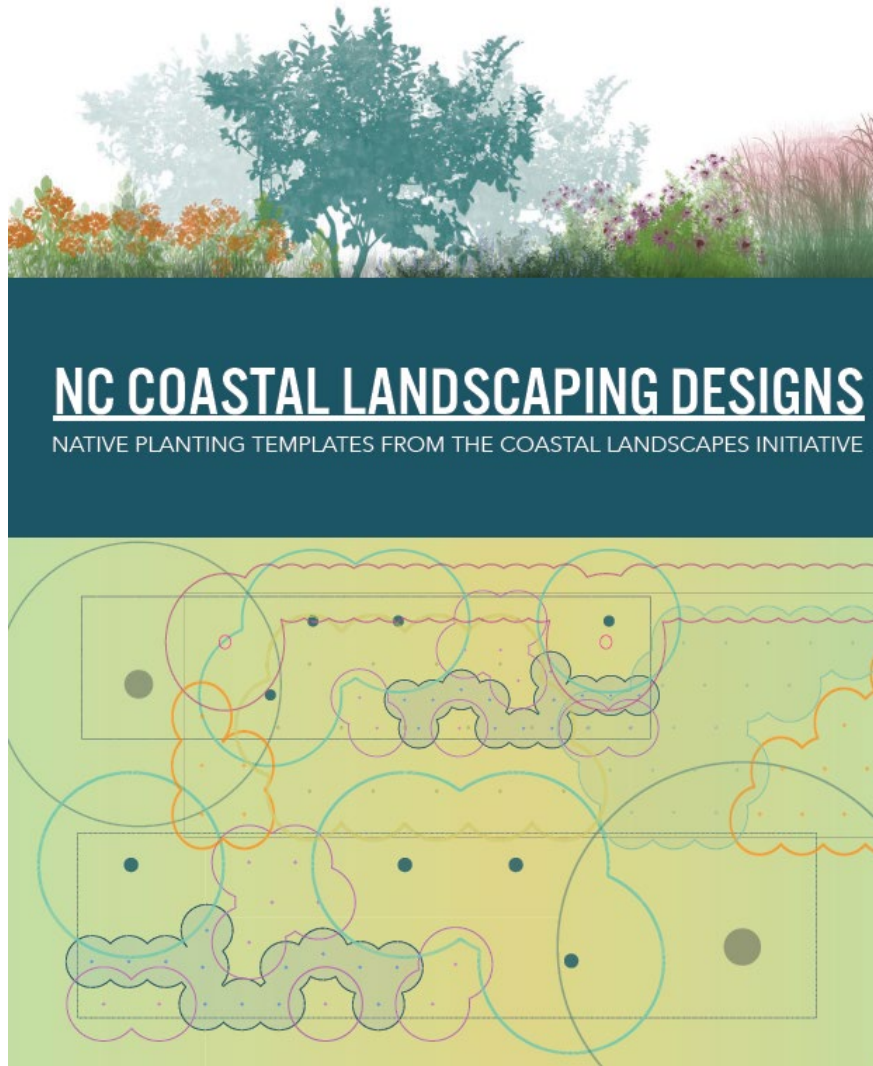
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NC Coastal Landscaping Native Plant Guide & Designs



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SCREENING WITH TREES

FOR SUNNY, MOIST AREAS

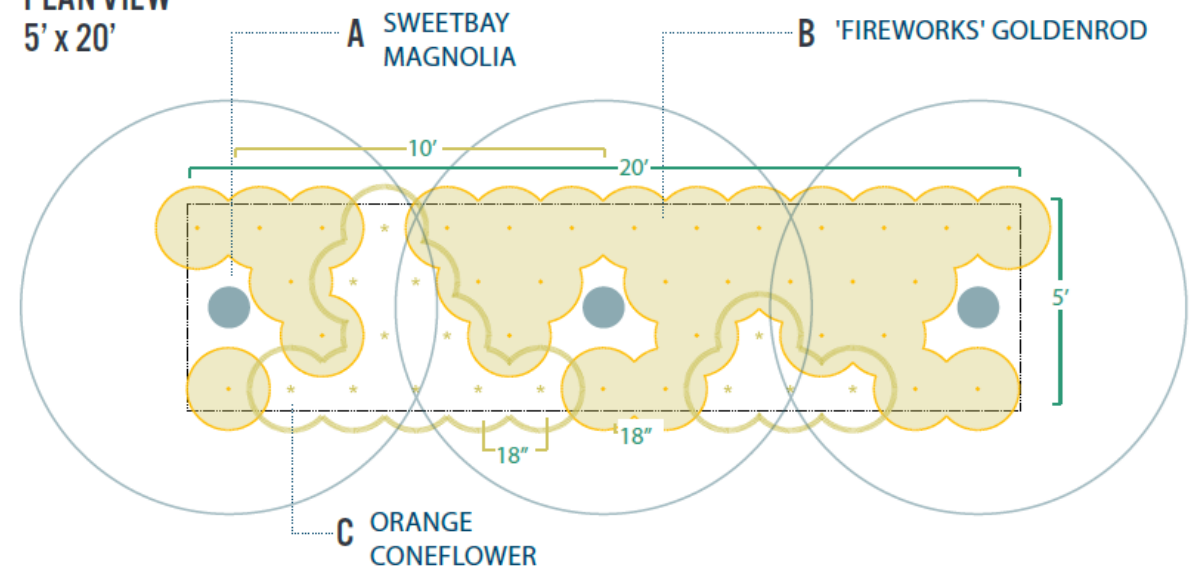
SUN: ☀️ 🌧️
SOIL MOISTURE: 💧
BLOOM TIME: MAY-NOV



ELEVATION VIEW



PLAN VIEW 5' x 20'



POLLINATOR FRIENDLY BORDER



VINE SCREEN



SHORELINE BORDER



FOUNDATION



EVERGREEN BORDER

BIRDFRIENDLY BORDER





For more information,
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