

# Assateague Island

## National Park

### Climate Change Atlas Tree Species

#### Current and Potential Future Habitat, Capability, and Migration

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Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
loblolly pine	Pinus taeda	WDH	High	86.5	2768.35	32.23	No change	No change	Medium	Abundant	Good	Good	Infill ++	Infill ++	1	1
red maple	Acer rubrum	WDH	High	86.4	1519.02	18.75	Sm. dec.	Sm. dec.	High	Abundant	Good	Good	Infill ++	Infill ++	1	2
sweetgum	Liquidambar styraciflua	WDH	High	80.8	804.43	10.47	No change	No change	Medium	Abundant	Good	Good	Infill ++	Infill ++	1	3
American holly	Ilex opaca	NSL	Medium	76.5	494.66	6.92	Sm. dec.	Sm. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	4
white oak	Quercus alba	WDH	Medium	47.7	309.21	6.76	Sm. dec.	Sm. dec.	High	Common	Fair	Fair	Infill +	Infill +	1	5
blackgum	Nyssa sylvatica	WDL	Medium	71.5	264.83	4	No change	No change	High	Common	Good	Good	Infill ++	Infill ++	1	6
black cherry	Prunus serotina	WDL	Medium	46.5	216.11	5.5	No change	No change	Low	Common	Poor	Poor	Infill +	Infill +	0	7
southern red oak	Quercus falcata	WDL	Medium	48.8	146.69	3.56	Sm. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	8
yellow-poplar	Liriodendron tulipifera	WDH	High	29.9	125.18	4.53	Lg. inc.	Sm. inc.	High	Common	Very Good	Very Good	Infill ++	Infill ++	1	9
Virginia pine	Pinus virginiana	NDH	High	23.7	119.19	4.08	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +		0	10
sassafras	Sassafras albidum	WSL	Low	31.7	92.57	2.84	Lg. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +		0	11
water oak	Quercus nigra	WDH	High	43.3	83.91	2.25	Lg. inc.	Lg. inc.	Medium	Common	Very Good	Very Good	Infill ++	Infill ++	1	12
scarlet oak	Quercus coccinea	WDL	Medium	27.6	83.38	3.29	Sm. dec.	Lg. dec.	Medium	Common	Poor	Poor	Infill +	Infill +	0	13
willow oak	Quercus phellos	NSL	Low	29.7	74.06	2.63	Sm. inc.	Lg. inc.	Medium	Common	Good	Very Good	Infill ++	Infill ++	1	14
mockernut hickory	Carya alba	WDL	Medium	10.3	65.9	5.77	Sm. dec.	Sm. inc.	High	Common	Fair	Very Good	Infill +	Infill ++	1	15
black oak	Quercus velutina	WDH	High	19.9	64.48	3.77	Sm. inc.	Sm. dec.	Medium	Common	Good	Poor	Infill ++	Infill +	1	16
green ash	Fraxinus pennsylvanica	WSH	Low	9.9	56.46	5.69	No change	No change	Medium	Common	Fair	Fair	Infill +	Infill +	2	17
sweetbay	Magnolia virginiana	NSL	Medium	20.7	48.87	2.07	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good	Infill ++	Infill ++	1	18
American beech	Fagus grandifolia	WDH	High	18	48.55	3.03	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	19
swamp chestnut oak	Quercus michauxii	NSL	Low	16.5	43.78	2.31	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	1	20
white ash	Fraxinus americana	WDL	Medium	6.2	21.75	3.45	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	21
bald cypress	Taxodium distichum	NSH	Medium	3.5	21.48	5.53	Lg. inc.	Lg. inc.	Medium	Rare	Good	Good			2	22
cherrybark oak; swamp red o	Quercus pagoda	NSL	Medium	9.9	20.51	2.06	No change	No change	Medium	Rare	Poor	Poor		Infill +	2	23
northern red oak	Quercus rubra	WDH	Medium	7.6	20.48	2.03	Lg. dec.	Lg. dec.	High	Rare	Poor	Poor	Infill +	Infill +	2	24
flowering dogwood	Cornus florida	WDL	Medium	12.9	18.33	1.47	Lg. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	1	25
common persimmon	Diospyros virginiana	NSL	Low	5.9	16.89	3.22	No change	Sm. dec.	High	Rare	Fair	Poor			0	26
eastern redcedar	Juniperus virginiana	WDH	Medium	12.5	15.34	1.42	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	27
American hornbeam; muscle	Carpinus caroliniana	WSL	Low	8.7	13.27	1.53	No change	No change	Medium	Rare	Poor	Poor	Infill +	Infill +	2	28
swamp tupelo	Nyssa biflora	NDH	Medium	6.6	13.21	4.63	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair	Infill +	Infill +	2	29
shortleaf pine	Pinus echinata	WDH	High	3.7	12.67	3.38	No change	Sm. inc.	Medium	Rare	Poor	Fair		Infill +	2	30
post oak	Quercus stellata	WDH	High	3.7	12.2	3.28	No change	Lg. inc.	High	Rare	Fair	Good			2	31
chestnut oak	Quercus prinus	NDH	High	1.2	11.24	9.07	Lg. dec.	Very Lg. dec.	High	Rare	Poor	Lost			0	32
sycamore	Platanus occidentalis	NSL	Low	1.2	10.54	8.5	No change	No change	Medium	Rare	Poor	Poor			2	33
Atlantic white-cedar	Chamaecyparis thyoides	NSH	Low	3.7	8.13	2.19	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	34
pignut hickory	Carya glabra	WDL	Medium	6.3	7.75	1.24	Sm. dec.	No change	Medium	Rare	Very Poor	Poor		Infill +	2	35
black walnut	Juglans nigra	WDH	Low	2.5	6.09	2.45	Lg. dec.	Very Lg. dec.	Medium	Rare	Very Poor	Lost			0	36
river birch	Betula nigra	NSL	Low	2.3	5.23	1.92	No change	Lg. inc.	Medium	Rare	Poor	Good			2	37
black ash	Fraxinus nigra	WSH	Medium	1.2	4.93	3.98	Sm. dec.	Sm. dec.	Low	Rare	Very Poor	Very Poor			0	38
pecan	Carya illinoensis	NSH	Low	2.9	4.51	8.55	No change	Lg. inc.	Low	Rare	Very Poor	Fair		Infill +	2	39
sand hickory	Carya pallida	NSL	FIA	3.7	4.25	1.14	Unknown	Unknown	NA	Rare	FIA Only	FIA Only			0	40
overcup oak	Quercus lyrata	NSL	Medium	2.5	3.79	1.53	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair		Infill +	2	41
black willow	Salix nigra	NSH	Low	2.5	3.79	1.53	Lg. inc.	Lg. inc.	Low	Rare	Fair	Fair		Infill +	2	42
red mulberry	Morus rubra	NSL	Low	3.7	3.43	0.92	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	43
pin oak	Quercus palustris	NSH	Low	1.2	3.35	2.7	Lg. dec.	Lg. dec.	Low	Rare	Very Poor	Very Poor			0	44
black locust	Robinia pseudoacacia	NDH	Low	1.2	2.39	1.93	Very Lg. dec.	Very Lg. dec.	Medium	Rare	Lost	Lost			0	45
bitternut hickory	Carya cordiformis	WSL	Low	1.2	2.35	1.9	Very Lg. dec.	Very Lg. dec.	High	Rare	Lost	Lost			0	46
swamp white oak	Quercus bicolor	NSL	Low	1.2	1.8	1.45	Lg. dec.	Lg. dec.	Medium	Rare	Very Poor	Very Poor			0	47
sourwood	Oxydendrum arboreum	NDL	High	1.2	1.4	1.13	Sm. inc.	Sm. inc.	High	Rare	Good	Good			2	48
Siberian elm	Ulmus pumila	NDH	FIA	1.1	1.12	0.78	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	49
Norway maple	Acer platanoides	NSL	FIA	1.2	0.93	0.75	Unknown	Unknown	NA	Rare	NNIS	NNIS			0	50
bigtooth aspen	Populus grandidentata	NSL	Medium	3.1	0.83	1.67	Sm. dec.	Sm. dec.	Medium	Rare	Very Poor	Very Poor			0	51
turkey oak	Quercus laevis	NSH	Medium	1.6	0.74	0.78	Lg. inc.	Lg. inc.	High	Rare	Good	Good			2	52
slash pine	Pinus elliotii	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate ++	3	53



Common Name	Scientific Name	Range	MR	%Cell	FIAsum	FIAiv	ChngCl45	ChngCl85	Adap	Abund	Capabil45	Capabil85	SHIFT45	SHIFT85	SSO	N
longleaf pine	Pinus palustris	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	54
pitch pine	Pinus rigida	NSH	High	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	55
pond pine	Pinus serotina	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	56
pond cypress	Taxodium ascendens	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	57
silver maple	Acer saccharinum	NSH	Low	0	0	0	New Habitat	Unknown	High	Absent	New Habitat	Unknown			3	58
serviceberry	Amelanchier spp.	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	59
pawpaw	Asimina triloba	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	60
gray birch	Betula populifolia	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	61
cittamwood/gum bumelia	Sideroxylon lanuginosum ssp	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	62
water hickory	Carya aquatica	NSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	63
shagbark hickory	Carya ovata	WSL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	64
black hickory	Carya texana	NDL	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			0	65
sugarberry	Celtis laevigata	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	66
hackberry	Celtis occidentalis	WDH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			3	67
loblolly-bay	Gordonia lasianthus	NSH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	68
cucumbertree	Magnolia acuminata	NSL	Low	0	0	0	Unknown	Unknown	Medium	Modeled	Unknown	Unknown			0	69
bigleaf magnolia	Magnolia macrophylla	NSL	Low	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	70
water tupelo	Nyssa aquatica	NSH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	71
eastern hophornbeam; ironw	Ostrya virginiana	WSL	Low	0	0	0	Unknown	Unknown	High	Absent	Unknown	Unknown			0	72
redbay	Persea borbonia	NSL	Low	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat	Migrate +	Migrate +	3	73
water elm	Planera aquatica	NSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	74
quaking aspen	Populus tremuloides	WDH	High	0	0	0	Unknown	Unknown	Medium	Absent	Unknown	Unknown			0	75
laurel oak	Quercus laurifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Migrate +	Migrate ++	3	76
Nuttall oak	Quercus texana	NSH	Medium	0	0	0	New Habitat	New Habitat	High	Absent	New Habitat	New Habitat			0	77
live oak	Quercus virginiana	NDH	High	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	78
winged elm	Ulmus alata	WDL	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat		Migrate +	3	79
American elm	Ulmus americana	WDH	Medium	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat	Likely +	Likely +	3	80
cedar elm	Ulmus crassifolia	NDH	Medium	0	0	0	New Habitat	New Habitat	Low	Absent	New Habitat	New Habitat			0	81
slippery elm	Ulmus rubra	WSL	Low	0	0	0	New Habitat	New Habitat	Medium	Absent	New Habitat	New Habitat			3	82