

Appendix B1. Plant Species Recorded from Wake Atoll in 2019

Table B1.1. List of plant species recorded from Wake Atoll, with full taxonomic nomenclature and selected synonyms.

[Taxonomy follows Roskov and others (2019). **Abbreviation:** —, not applicable]

Family	Family common name	Full taxonomic name	Life form	Common name	Synonyms
Monocots					
Amaryllidaceae	Amaryllis family	<i>Allium cepa</i> L.	Herb	Bulb onion, globe onion	—
Amaryllidaceae	Amaryllis family	<i>Allium fistulosum</i> L.	Herb	Green onion, scallion	—
Amaryllidaceae	Amaryllis family	<i>Allium tuberosum</i> Rottler ex Spreng.	Herb	Garlic chives	—
Amaryllidaceae	Amaryllis family	<i>Crinum amabile</i> Donn ex Ker Gawl.	Herb	Spider lily, Queen Emma crinum	<i>Crinum augustum</i>
Amaryllidaceae	Amaryllis family	<i>Crinum asiaticum</i> L.	Herb	Spider lily, giant crinum lily	—
Amaryllidaceae	Amaryllis family	<i>Hippeastrum</i> sp.	Herb	Amaryllis	—
Amaryllidaceae	Amaryllis family	<i>Hymenocallis littoralis</i> (Jacq.) Salisb.	Herb	Beach spider lily	<i>Hymenocallis pedalis</i>
Araceae	Aroid family	<i>Caladium bicolor</i> (Aiton) Vent.	Herb	Caladium, heart of Jesus	—
Araceae	Aroid family	<i>Colocasia esculenta</i> (L.) Schott	Herb	Taro	—
Araceae	Aroid family	<i>Dieffenbachia seguine</i> (Jacq.) Schott	Herb	Dumb cane	—
Araceae	Aroid family	<i>Epipremnum aureum</i> (Linden & André) G.S. Bunting	Vine	Devil's ivy, taro vine	<i>Rhaphidophora aurea</i>
Araceae	Aroid family	<i>Epipremnum pinnatum</i> (L.) Engl.	Vine	Pothos, taro vine	—
Araceae	Aroid family	<i>Philodendron hederaceum</i> var. <i>oxycardium</i> (Schott) Croat	Vine	Heartleaf philodendron, vilevine	<i>Phyllodendron oxycardium</i>
Araceae	Aroid family	<i>Philodendron undulatum</i> Engl.	Vine	Philodendron	—
Araceae	Aroid family	<i>Syngonium auritum</i> (L.) Schott	Vine	Syngonium, arrowhead vine	—
Arecaceae	Palm family	<i>Adonidia merrillii</i> (Becc.) Becc.	Tree	Manila palm; Christmas palm	—
Arecaceae	Palm family	<i>Cocos nucifera</i> L.	Tree	Coconut	—
Arecaceae	Palm family	<i>Phoenix</i> sp.	Tree	Date palm	—
Asparagaceae	Asparagus family	<i>Agave americana</i> L.	Shrub	Century plant	—
Asparagaceae	Asparagus family	<i>Agave angustifolia</i> Haw.	Shrub	Century plant	—
Asparagaceae	Asparagus family	<i>Agave sisalana</i> Perrine	Shrub	Sisal	—
Asparagaceae	Asparagus family	<i>Asparagus densiflorus</i> (Kunth) Jessop	Shrub	Asparagus fern	—
Asparagaceae	Asparagus family	<i>Chlorophytum comosum</i> (Thunb.) Jacques	Herb	Spider plant	—
Asparagaceae	Asparagus family	<i>Cordyline fruticosa</i> (L.) A.Chev.	Shrub	Ti	<i>Cordyline terminalis</i>
Asparagaceae	Asparagus family	<i>Dracaena reflexa</i> var. <i>angustifolia</i> Baker	Shrub	Song of India, pleomele	<i>Dracaena marginata</i>
Asparagaceae	Asparagus family	<i>Sansevieria hyacinthoides</i> (L.) Druce	Herb	Iguana tail, African bowstring hemp	<i>Sansevieria guineensis</i>

Table B1.1. List of plant species recorded from Wake Atoll, with full taxonomic nomenclature and selected synonyms.—Continued

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Family	Family common name	Full taxonomic name	Life form	Common name	Synonyms
Monocots—Continued					
Asparagaceae	Asparagus family	<i>Sansevieria trifasciata</i> Prain	Herb	Snake plant, mother-in-law's tongue	—
Asphodelaceae	Asphodelus family	<i>Aloe vera</i> (L.) Burm.f.	Herb	Aloe	—
Bromeliaceae	Bromeliad family	<i>Ananas comosus</i> (L.) Merr.	Herb	Pineapple	—
Bromeliaceae	Bromeliad family	<i>Nidularium</i> sp.	Shrub	Nidularium, nest bromeliad	—
Commelinaceae	Spiderwort family	<i>Tradescantia pallida</i> (Rose) D.R. Hunt	Herb	Purple tradescantia, wandering jew	<i>Setcreasea purpurea</i>
Commelinaceae	Spiderwort family	<i>Tradescantia spathacea</i> Sw.	Herb	Oyster plant	<i>Rhoeo spathacea</i>
Cyperaceae	Sedge family	<i>Cyperus alternifolius</i> L.	Sedge	Umbrella sedge	—
Cyperaceae	Sedge family	<i>Cyperus pumilus</i> L.	Sedge	Low flatsedge	—
Cyperaceae	Sedge family	<i>Cyperus rotundus</i> L.	Sedge	Nutgrass, umbrella sedge	—
Cyperaceae	Sedge family	<i>Fimbristylis cymosa</i> R.Br.	Sedge	Tropical fimbry	—
Cyperaceae	Sedge family	<i>Fimbristylis dichotoma</i> (L.) Vahl	Sedge	Forked fimbry	—
Hydrocharitaceae	Frog's-bit family	<i>Egeria densa</i> Planch.	Herb	Brazilian waterweed	—
Musaceae	Banana family	<i>Musa acuminata</i> Colla	Herb	Cavendish banana	—
Orchidaceae	Orchid family	Orchid sp.	Herb	Orchid species	—
Pandanaceae	Screw pine family	<i>Pandanus tectorius</i> Parkinson ex Du Roi	Tree	Hala, screwpine	—
Poaceae	Grass family	<i>Bothriochloa pertusa</i> (L.) A.Camus	Grass	Pitted beardgrass	—
Poaceae	Grass family	<i>Cenchrus brownii</i> Roem. & Schult.	Grass	Slim-bristle sandbur	—
Poaceae	Grass family	<i>Cenchrus echinatus</i> L.	Grass	Sandbur	—
Poaceae	Grass family	<i>Chloris barbata</i> Sw.	Grass	Swollen fingergrass	<i>Chloris inflata</i>
Poaceae	Grass family	<i>Cymbopogon citratus</i> (DC.) Stapf	Grass	Lemon grass	—
Poaceae	Grass family	<i>Cynodon dactylon</i> (L.) Pers.	Grass	Bermuda grass	—
Poaceae	Grass family	<i>Dactyloctenium aegyptium</i> (L.) Willd.	Grass	Beach wiregrass, crowfoot grass	—
Poaceae	Grass family	<i>Digitaria ciliaris</i> (Retz.) Koeler	Grass	Henry's crabgrass, southern crabgrass	—
Poaceae	Grass family	<i>Digitaria gaudichaudii</i> (Kunth) Henrard	Grass	Crabgrass	—
Poaceae	Grass family	<i>Digitaria insularis</i> (L.) Mez ex Ekman	Grass	Sourgrass	—
Poaceae	Grass family	<i>Eleusine indica</i> (L.) Gaertn.	Grass	Indian goosegrass, wiregrass	—
Poaceae	Grass family	<i>Eragrostis amabilis</i> (L.) Wight & Arn.	Grass	Japanese lovegrass (syn: <i>E. tenella</i>)	<i>Eragrostis tenella</i>
Poaceae	Grass family	<i>Eragrostis minor</i> Host	Grass	Lesser love grass, small stink grass	<i>Eragrostis poaeoides</i>

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Family	Family common name	Full taxonomic name	Life form	Common name	Synonyms
Monocots—Continued					
Poaceae	Grass family	<i>Eragrostis scabriflora</i> Swallen	Grass	No common name found	—
Poaceae	Grass family	<i>Eustachys petraea</i> (Sw.) Desv.	Grass	Pinewoods fingergrass	—
Poaceae	Grass family	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Pacific Island thintail	<i>Lepturus gasparriensis</i>
Poaceae	Grass family	<i>Paspalum scrobiculatum</i> L.	Grass	Ricegrass, Kodo millet (Syn: <i>P. orbiculare</i>)	<i>Paspalum auriculatum</i> , <i>P. cartilagineum</i>
Poaceae	Grass family	<i>Paspalum setaceum</i> Michx.	Grass	Thin paspalum, fringeleaf paspalum	—
Poaceae	Grass family	<i>Paspalum vaginatum</i> Sw.	Grass	Seashore paspalum, biscuit grass	—
Poaceae	Grass family	<i>Setaria verticillata</i> (L.) P.Beauv.	Grass	Bristly foxtail	—
Poaceae	Grass family	<i>Sorghum bicolor</i> (L.) Moench	Grass	Sweet sorghum	<i>Sorghum dochna</i> var. <i>technicum</i>
Poaceae	Grass family	<i>Zea mays</i> L.	Grass	Corn	—
Poaceae	Grass family	<i>Zoysia matrella</i> (L.) Merr.	Grass	Manila grass	—
Pontederiaceae	Pickerel weed family	<i>Eichhornia crassipes</i> (Mart.) Solms	Aquatic herb	Water hyacinth	—
Strelitziaceae	Bird of paradise family	<i>Strelitzia reginae</i> Banks	Large herb	Bird-of-paradise	—
Zingiberaceae	Ginger family	<i>Alpinia galanga</i> (L.) Willd.	Large herb	Galanga, Thai ginger, blue ginger	—
Zingiberaceae	Ginger family	<i>Alpinia purpurata</i> (Vieill.) K.Schum.	Large herb	Red ginger	—
Zingiberaceae	Ginger family	<i>Hedychium coronarium</i> J.Koenig	Large herb	White ginger	—
Gymnosperms					
Araucariaceae	Araucaria family	<i>Araucaria heterophylla</i> (Salisb.) Franco	Tree	Norfolk Island pine	—
Ferns					
Polypodiaceae	Polypody family	<i>Phymatosorus scolopendria</i> (Burm. fil.) Pic. Serm.	Fern	Laua'e fern, wart fern	—
Psilotaceae	Whisk fern family	<i>Psilotum nudum</i> (L.) P. Beauv.	Fern	Moa; wisk fern	—
Dicots					
Acanthaceae	Acanthus family	<i>Pseuderanthemum carruthersii</i> (Seem.) Guill.	Shrub	Carruthers' falseface; yellow-veined Eranthemum	<i>Pseuderanthemum carruthersii</i> var. <i>carruthersii</i>
Acanthaceae	Acanthus family	<i>Pseuderanthemum carruthersii</i> var. <i>atropurpureum</i> (Bull) Fosberg	Shrub	Purple false Eranthemum	<i>Pseuderanthemum carruthersii</i> var. <i>atropurpureum</i>
Aizoaceae	Fig-marigold family	<i>Sesuvium portulacastrum</i> (L.) L.	Herb	Shoreline seapurslane; `akulikuli	—
Amaranthaceae	Amaranth family	<i>Amaranthus blitum</i> L.	Herb	Purple amaranth, sender amaranth	<i>Amaranthus viridis</i>

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Dicots—Continued					
Amaranthaceae	Amaranth family	<i>Amaranthus dubius</i> Mart.	Herb	Spleen amaranth, red spinach	—
Amaranthaceae	Amaranth family	<i>Amaranthus graecizans</i> L.	Herb	Mediterranean amaranth, short-tepalled pigweed	—
Amaranthaceae	Amaranth family	<i>Gomphrena globosa</i> L.	Herb	Bachelor's button; globe amaranth	—
Anacardiaceae	Mango family	<i>Mangifera indica</i> L.	Tree	Mango	—
Anacardiaceae	Mango family	<i>Spondias pinnata</i> (L. fil.) Kurz	Tree	Wild mango, hog plum	—
Annonaceae	Custard apple family	<i>Annona muricata</i> L.	Tree	Soursop	—
Annonaceae	Custard apple family	<i>Annona squamosa</i> L.	Tree	Sugar apple, custard apple, sweetsop	—
Apiaceae	Parsley family	<i>Anethum graveolens</i> L.	Herb	Dill	—
Apiaceae	Parsley family	<i>Coriandrum sativum</i> L.	Herb	Cilantro, coriander, Chinese parsley	—
Apiaceae	Parsley family	<i>Eryngium foetidum</i> L.	Herb	False coriander, serrated coriander	—
Apiaceae	Parsley family	<i>Petroselinum crispum</i> (Mill.) Fuss	Herb	Parsley	<i>Apium petroselinum</i>
Apocynaceae	Dogbane family	<i>Adenium obesum</i> (Forsk.) Roem. & Schult.	Shrub	Desert rose	—
Apocynaceae	Dogbane family	<i>Calotropis gigantea</i> (L.) W. T. Aiton	Shrub	Crown flower	—
Apocynaceae	Dogbane family	<i>Catharanthus roseus</i> (L.) G. Don	Herb	Periwinkle, Madagascar periwinkle	—
Apocynaceae	Dogbane family	<i>Nerium oleander</i> L.	Shrub	Oleander	—
Apocynaceae	Dogbane family	<i>Plumeria obtusa</i> L.	Tree	Plumeria, frangipani	—
Apocynaceae	Dogbane family	<i>Plumeria rubra</i> L.	Tree	Common frangipani, red frangipani	—
Araliaceae	Ginseng family	<i>Polyscias fruticosa</i> (L.) Harms	Shrub	Ming aralia	—
Araliaceae	Ginseng family	<i>Polyscias guilfoylei</i> (W.Bull) L.H.Bailey	Shrub	Panax, geranium aralia	—
Araliaceae	Ginseng family	<i>Polyscias scutellaria</i> (Burm.f.) Fosberg	Shrub	Shield aralia, plum aralia	—
Araliaceae	Ginseng family	<i>Schefflera actinophylla</i> (Endl.) Harms	Tree	Octopus tree, umbrella tree	<i>Brassaia actinophylla</i>
Asteraceae	Sunflower family	<i>Bidens alba</i> (L.) DC	Herb	Beggarticks, Spanish needles	—
Asteraceae	Sunflower family	<i>Erigeron bonariensis</i> L.	Herb	Hairy horseweed, hairy fleabane	<i>Conyza bonariensis</i>
Asteraceae	Sunflower family	<i>Erigeron canadensis</i> L.	Herb	Canada fleabane, horseweed	<i>Conyza canadensis</i>

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Dicots—Continued					
Asteraceae	Sunflower family	<i>Helianthus annuus</i> L.	Herb	Common sunflower	—
Asteraceae	Sunflower family	<i>Lactuca sativa</i> L.	Herb	Lettuce	—
Asteraceae	Sunflower family	<i>Pluchea carolinensis</i> (Jacq.) G. Don	Shrub	Sourbush, fleabane	—
Asteraceae	Sunflower family	<i>Pluchea odorata</i> (L.) Cass.	Shrub	Camphor-weed, saltmarsh fleabane	—
Asteraceae	Sunflower family	<i>Sonchus oleraceus</i> L.	Herb	Common sowthistle	—
Asteraceae	Sunflower family	<i>Tagetes erecta</i> L.	Herb	Marigold	<i>Tagetes patula</i>
Asteraceae	Sunflower family	<i>Tridax procumbens</i> L.	Herb	Coatbuttons, tridax daisy	—
Asteraceae	Sunflower family	<i>Zinnia elegans</i> Jacq.	Herb	Garden zinnia	<i>Zinnia violacea</i>
Bignoniaceae	Bignonia family	<i>Tabebuia aurea</i> (Manso) Benth. & Hook. fil. ex S. Moore	Tree	Silver trumpet-tree	<i>Tabebuia argentea</i>
Brassicaceae	Mustard family	<i>Brassica nigra</i> (L.) W.D.J. Koch	Herb	Black mustard	—
Brassicaceae	Mustard family	<i>Brassica oleracea</i> L.	Herb	Cabbage, kale, kohlrabi, cauliflower, broccoli, etc.	—
Brassicaceae	Mustard family	<i>Lepidium bidentatum</i> L.	Herb	Pepperwort	—
Brassicaceae	Mustard family	<i>Lobularia maritima</i> (L.) Desv.	Herb	Sweet alyssum or sweet alison	—
Brassicaceae	Mustard family	<i>Raphanus sativus</i> L.	Herb	Raddish	—
Cactaceae	Cactus family	<i>Nopalea cochenillifera</i> (L.) Salm-Dyck	Shrub	Cochinilla cactus	<i>Opuntia cochenillifera</i>
Cactaceae	Cactus family	<i>Opuntia littoralis</i> (Engelm.) Cockerell	Shrub	Coastal prickly pear cactus	—
Caricaceae	Papaya family	<i>Carica papaya</i> L.	Tree	Papaya	—
Cleomaceae	Cleome family	<i>Gynandropsis gynandra</i> (L.) Briq.	Tree	Ironwood; Australian pine tree	<i>Cleome gynandra</i>
Commelinaceae	Spiderwort family	<i>Casuarina equisetifolia</i> L.	Herb	African spider-flower	—
Commelinaceae	Spiderwort family	<i>Terminalia catappa</i> L.	Tree	Indian almond, false kamani	—
Convolvulaceae	Morning glory family	<i>Cuscuta pentagona</i> Engelm.	Vine	Fiveangled dodder	—
Convolvulaceae	Morning glory family	<i>Ipomoea aquatica</i> Forsk.	Vine	Swamp morning-glory, Chinese watercress	—
Convolvulaceae	Morning glory family	<i>Ipomoea batatas</i> (L.) Lam.	Vine	Sweet potato	—
Convolvulaceae	Morning glory family	<i>Ipomoea pes-caprae</i> subsp. <i>brasiliensis</i> (L.) Ooststr.	Vine	Beach morning-glory, pohuehue; puhuehue	—

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Dicots—Continued					
Convolvulaceae	Morning glory family	<i>Ipomoea violacea</i> L.	Vine	Beach moon-flower, heavenlyblue morning-glory	<i>Ipomoea tuba</i>
Crassulaceae	Orpine family	<i>Crassula ovata</i> (Mill.) Druce	Herb	Jade plant	—
Crassulaceae	Orpine family	<i>Kalanchoe daigremontiana</i> R.-Hamet & Perrier	Herb	Devil's backbone, alligator plant	—
Crassulaceae	Orpine family	<i>Kalanchoe delagoensis</i> Eckl. & Zeyh.	Herb	Chandelier plant	—
Crassulaceae	Orpine family	<i>Kalanchoe pinnata</i> (Lam.) Pers.	Herb	Air plant, cathedral bells	—
Crassulaceae	Orpine family	<i>Sedum</i> sp.	Herb	Stonecrop	—
Crassulaceae	Orpine family	<i>Sempervivum tectorum</i> L.	Herb	Common houseleek	—
Cucurbitaceae	Gourd family	<i>Coccinia grandis</i> (L.) Voigt	Vine	Ivy gourd	—
Cucurbitaceae	Gourd family	<i>Cucumis melo</i> L.	Vine	Cantaloupe, muskmelon	—
Cucurbitaceae	Gourd family	<i>Cucurbita pepo</i> L.	Vine	Pumpkin, squash	—
Cucurbitaceae	Gourd family	<i>Momordica charantia</i> L.	Vine	Bitter melon	—
Ehretiaceae	Ehretiaceae family	<i>Cordia subcordata</i> Lamarck	Tree	Kou	—
Euphorbiaceae	Spurge family	<i>Codiaeum variegatum</i> (L.) Rumph. ex A.Juss.	Shrub	Garden croton or variegated croton	—
Euphorbiaceae	Spurge family	<i>Euphorbia heterophylla</i> var. <i>cyathophora</i> (Murray) Griseb.	Herb	Dwarf poinsettia, wild poinsettia	<i>Euphorbia cyathophora</i>
Euphorbiaceae	Spurge family	<i>Euphorbia hirta</i> L.	Herb	Hairy spurge, garden spurge	<i>Chamaesyce hirta</i>
Euphorbiaceae	Spurge family	<i>Euphorbia hypericifolia</i> L.	Shrub	Graceful spurge	<i>Euphorbia hypericifolia</i> , <i>Euphorbia glomerifera</i>
Euphorbiaceae	Spurge family	<i>Euphorbia lactea</i> Haw.	Shrub	Mottled spurge, frilled fan, candlestick tree	—
Euphorbiaceae	Spurge family	<i>Euphorbia milii</i> Des Moul.	Shrub	Crown of thorns, Christ plant, or Christ thorn	—
Euphorbiaceae	Spurge family	<i>Euphorbia prostrata</i> Aiton	Herb	Prostrate purge or prostrate sandmat	<i>Chamaesyce prostrata</i>
Euphorbiaceae	Spurge family	<i>Euphorbia pulcherrima</i> Willd. ex Klotzsch	Shrub	Poinsettia; Christmas star	—
Euphorbiaceae	Spurge family	<i>Euphorbia thymifolia</i> L.	Herb	Chickenweed	<i>Chamaesyce thymifolia</i>
Euphorbiaceae	Spurge family	<i>Euphorbia tirucalli</i> L.	Shrub	Firestick, pencil tree, pencil cactus	—

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Dicots—Continued					
Euphorbiaceae	Spurge family	<i>Euphorbia tithymaloides</i> L.	Shrub	Redbird cactus, buck-thorn, Christmas candle	<i>Pedilanthus tithymaloides</i>
Euphorbiaceae	Spurge family	<i>Jatropha integerrima</i> Jacq.	Shrub	Rose-flowered jatropha	—
Euphorbiaceae	Spurge family	<i>Ricinus communis</i> L.	Shrub	Castor bean or castor oil plant	—
Fabaceae	Pea family	<i>Bauhinia</i> sp.	Tree	Orchid tree	—
Fabaceae	Pea family	<i>Caesalpinia bonduc</i> (L.)Roxb.	Vine	Grey nicker, nicker bean, kakalaoa	—
Fabaceae	Pea family	<i>Dalea emarginata</i> (Torr. & A.Gray)Shinners	Herb	Wedgeleaf prairie clover	—
Fabaceae	Pea family	<i>Delonix regia</i> (Hook.) Raf.	Tree	Poinciana, flame tree	—
Fabaceae	Pea family	<i>Desmanthus pernambucanus</i> (L.)Thell.	Shrub	Wild tantan, prostrate bundleflower, dwarf koa	—
Fabaceae	Pea family	<i>Desmanthus virgatus</i> (L.)Willd.	Shrub	Wild tantan, prostrate bundleflower, dwarf koa	—
Fabaceae	Pea family	<i>Gliricidia sepium</i> (Jacq.)Walp.	Tree	Gliricidia	—
Fabaceae	Pea family	<i>Leucaena leucocephala</i> (Lam.)de Wit	Tree	Koa haole, tangantangan, lead tree	—
Fabaceae	Pea family	<i>Phaseolus coccineus</i> L.	Vine	Snap bean, scarlet runner bean	—
Fabaceae	Pea family	<i>Phaseolus vulgaris</i> L.	Vine	Common bean, snap bean	—
Fabaceae	Pea family	<i>Pithecellobium dulce</i> (Roxb.)Benth.	Tree	Opiuma, Manila tamarind	—
Fabaceae	Pea family	<i>Psophocarpus tetragonolobus</i> (L.)DC.	Vine	Wing bean	—
Fabaceae	Pea family	<i>Samanea saman</i> (Jacq.) Merr.	Tree	Monkeypod	<i>Albizia saman</i>
Fabaceae	Pea family	<i>Sesbania grandiflora</i> (L.)Pers.	Tree	Hummingbird tree, scarlet wisteria	—
Fabaceae	Pea family	<i>Tamarindus indica</i> L.	Tree	Tamarind	—
Fabaceae	Pea family	<i>Vigna unguiculata</i> subsp. <i>sesquipedalis</i> (L.) Verdc.	Vine	Asparagus bean, yard-long bean	—
Goodeniaceae	Goodenia family	<i>Scaevola sericea</i> Forst. fil.	Shrub	Beach naupaka, naupaka kahakai	<i>Scaevola sericea</i> var. <i>taccada</i> , <i>S. taccada</i>
Heliotropiaceae	Heliotrop family	<i>Euploca procumbens</i> var. <i>depressum</i> (Chamisso)	Herb	Fourspike heliotrope (<i>Heliotropium procumbens</i>)	<i>Heliotropium procumbens</i> var. <i>depressum</i>
Heliotropiaceae	Heliotrop family	<i>Heliotropium anomalum</i> Hook. & Arn.	Herb	Hinahina, Polynesian heliotrope	—

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Dicots—Continued					
Heliotropiaceae	Heliotrop family	<i>Heliotropium foertherianum</i> Diane & Hilger	Tree	Tree heliotrope, octopus bush	<i>Tournefortia argentea</i>
Lamiaceae	Mint family	<i>Coleus scutellarioides</i> (L.) Benth.	Herb	Coleus	<i>Solenostemon scutellarioides</i> , <i>Plectranthus scutellarioides</i>
Lamiaceae	Mint family	<i>Mentha spicata</i> L.	Herb	Mint, spearmint	—
Lamiaceae	Mint family	<i>Ocimum basilicum</i> L.	Herb	Sweet basil	—
Lamiaceae	Mint family	<i>Ocimum tenuiflorum</i> L.	Herb	Holy basil, tulasi	—
Lamiaceae	Mint family	<i>Vitex trifolia</i> L.	Shrub	Blue vitex	—
Lecythidaceae	Brazil-nut family	<i>Barringtonia asiatica</i> (L.) Kurz	Tree	Fish poison tree	—
Lythraceae	Loosestrife family	<i>Pemphis acidula</i> J.R. Forster & G. Forster	Shrub	Pemphis	—
Malvaceae	Mallow family	<i>Abutilon indicum</i> subsp. <i>albescens</i> (Miq.) Borssum Waalkes	Shrub	Indian mallow	<i>Abutilon asiaticum</i> var. <i>albescens</i>
Malvaceae	Mallow family	<i>Gossypium stephensii</i> J.P.Gallagher, C.E.Grover & Wendel	Shrub	Wake Island cotton	—
Malvaceae	Mallow family	<i>Hibiscus</i> hybrid	Shrub	Hibiscus	—
Malvaceae	Mallow family	<i>Sida ciliaris</i> L.	Herb	Fringed Sida	—
Malvaceae	Mallow family	<i>Sida fallax</i> Walp.	Shrub	Ilima	—
Malvaceae	Mallow family	<i>Talipariti tiliaceum</i> (L.) Fryxell	Tree	Hau, sea hibiscus	<i>Hibiscus tiliaceus</i>
Malvaceae	Mallow family	<i>Thespesia populnea</i> (L.) Soland. ex Correa	Tree	Milo	—
Malvaceae	Mallow family	<i>Waltheria indica</i> L.	Herb	Uhaloa	—
Moraceae	Mulberry family	<i>Ficus benghalensis</i> L.	Tree	Banyan	—
Moraceae	Mulberry family	<i>Ficus carica</i> L.	Tree	Edible fig	—
Moraceae	Mulberry family	<i>Ficus microcarpa</i> L. fil.	Tree	Chinese banyan, Indian laurel fig	—
Moraceae	Mulberry family	<i>Ficus rubiginosa</i> Desf.	Tree	Port Jackson fig, rusty fig	—
Moraceae	Mulberry family	<i>Moringa oleifera</i> Lam.	Tree	Horseradish tree, drumstick tree	—
Myrtaceae	Myrtle family	<i>Corymbia citriodora</i> (Hook.) K.D. Hill & L.A.S. Johnson	Tree	Lemon-scented gum	<i>Eucalyptus citriodora</i>
Myrtaceae	Myrtle family	<i>Psidium guajava</i> L.	Tree	Common guava, lemon guava	—
Nyctaginaceae	Four-o'clock family	<i>Boerhavia albiflora</i> Fosberg	Herb	Spiderling	—
Nyctaginaceae	Four-o'clock family	<i>Boerhavia coccinea</i> Mill.	Herb	Scarlet spiderling	—
Nyctaginaceae	Four-o'clock family	<i>Boerhavia repens</i> L.	Herb	Red spiderling, hogweed	—
Nyctaginaceae	Four-o'clock family	<i>Bougainvillea spectabilis</i> Willd.	Shrub	Bougainvillea	—
Nyctaginaceae	Four-o'clock family	<i>Pisonia grandis</i> R. Br.	Tree	Papala kepau	—

Table B1.1. List of plant species recorded from Wake Atoll, with full taxonomic nomenclature and selected synonyms.—Continued[Taxonomy follows Roskov and others (2019). **Abbreviation:** —, not applicable]

Family	Family common name	Full taxonomic name	Life form	Common name	Synonyms
Dicots—Continued					
Nymphaeaceae	Water lily family	<i>Nymphaea</i> sp.	Aquatic herb	Lotus, waterlily	—
Oleaceae	Olive family	<i>Jasminum sambac</i> (L.) Aiton	Shrub	Arabian jasmine, Sambac jasmine	—
Oleaceae	Olive family	<i>Noronhia emarginata</i> (Lam.) Poir.	Shrub	Madagascar olive	—
Passifloraceae	Passion flower family	<i>Passiflora foetida</i> var. <i>hispida</i> (DC. ex Triana & Planchon) Killip ex Gleason	Vine	Passion fruit, scarletfruit passionflower	—
Phyllanthaceae	Phyllanthus family	<i>Phyllanthus acidus</i> (L.) Skeels	Shrub	Otaheite gooseberry	—
Phyllanthaceae	Phyllanthus family	<i>Phyllanthus amarus</i> Schumach. & Thonn.	Shrub	Hurricane weed, carry me seed	—
Polygonaceae	Buckwheat family	<i>Coccoloba uvifera</i> (L.) L.	Tree	Sea grape	—
Portulacaceae	Purslane family	<i>Portulaca lutea</i> Sol. ex Seem.	Herb	Yellow purslane	—
Portulacaceae	Purslane family	<i>Portulaca oleracea</i> L.	Herb	Purslane, hogweed, pigweed	—
Portulacaceae	Purslane family	<i>Portulaca pilosa</i> subsp. <i>pilosa</i> L.	Herb	Seashore purslane, rose-flowered purslane	<i>Portulaca samoensis</i> , <i>P. australis</i>
Rhamnaceae	Buckthorn family	<i>Ziziphus mauritiana</i> Lam.	Tree	Indian jujube, Chinese date	—
Rosaceae	Rose family	<i>Rosa</i> sp.	Shrub	Rose	—
Rubiaceae	Coffee family	<i>Gardenia taitensis</i> DC.	Shrub	Tiare	—
Rubiaceae	Coffee family	<i>Ixora</i> sp.	Shrub	Ixora	—
Rubiaceae	Coffee family	<i>Morinda citrifolia</i> L., nom. cons.	Tree	Noni, Indian-mulberry	—
Rubiaceae	Coffee family	<i>Oldenlandia corymbosa</i> L.	Herb	Flat-top mille graines, diamond flower	<i>Hedyotis corymbosa</i> (L.) Lam.
Rutaceae	Rue or citrus family	<i>Citrus hystrix</i> DC.	Tree	Kaffir lime, Thai lime	—
Rutaceae	Rue or citrus family	<i>Citrus</i> sp.	Tree	Citrus	—
Sapotaceae	Sapodilla family	<i>Chrysophyllum cainito</i> L.	Tree	Star apple, cainito	—
Sapotaceae	Sapodilla family	<i>Manilkara zapota</i> (L.) P.Royen	Tree	Sapodilla	—
Solanaceae	Nightshade family	<i>Capsicum annuum</i> L.	Shrub	Chili pepper, bell pepper, etc.	—
Solanaceae	Nightshade family	<i>Capsicum frutescens</i> L.	Shrub	Chili pepper	—
Solanaceae	Nightshade family	<i>Nicotiana tabacum</i> L.	Shrub	Tobacco	—
Solanaceae	Nightshade family	<i>Solanum lycopersicum</i> L.	Shrub	Tomato	<i>Lycopersicon esculentum</i>
Solanaceae	Nightshade family	<i>Solanum melongena</i> L.	Shrub	Egg plant	—
Solanaceae	Nightshade family	<i>Solanum torvum</i> Swartz	Shrub	Turkeyberry, pea eggplant	—

Table B1.1. List of plant species recorded from Wake Atoll, with full taxonomic nomenclature and selected synonyms.—Continued

[Taxonomy follows Roskov and others (2019). **Abbreviation:** —, not applicable]

Family	Family common name	Full taxonomic name	Life form	Common name	Synonyms
Dicots—Continued					
Tetrachondraceae	Tetrachondra family	<i>Polypremum procumbens</i> L.	Herb	Juniper leaf	—
Urticaceae	Nettle family	<i>Pilea microphylla</i> (L.) Liebm.	Herb	Artillery plant	—
Urticaceae	Nettle family	<i>Piper sarmentosum</i> Roxb.	Shrub	Lolot, wild betel	<i>Piper lolot</i>
Verbenaceae	Verbena family	<i>Stachytarpheta jamaicensis</i> (L.) Vahl	Shrub	Jamaica vervain, light-blue snakeweed	—
Verbenaceae	Verbena family	<i>Stachytarpheta urticifolia</i> Sims	Shrub	Blue rat’s tail, nettleleaf velvetberry	—
Zygophyllaceae	Creosote bush family	<i>Tribulus cistoides</i> L.	Shrub	Nohu	—
Zygophyllaceae	Creosote bush family	<i>Tribulus terrestris</i> L.	Shrub	Puncture vine	—

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Appendix B2. Plant Field Guide to Wake Atoll

Photograph and descriptive summary of native and introduced plant species that have been recorded on Wake Atoll. Taxa are organized with monocots first and dicots second. Within monocots and dicots, taxa are organized alphabetically by family name and then by genus within family.



Crinum amabile

Plant Group: Monocots

Family: Amaryllidaceae

Life Form: herb

Species Code: CriAma

Synonym(s): *Crinum augustum*

Common Name(s): spider lily, Queen Emma crinum

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Crinum asiaticum



Plant Group: Monocots Family: Amaryllidaceae Life Form: herb

Species Code: CriAsi Synonym(s):

Common Name(s): spider lily, giant crinum lily

Status on Wake: cultivated Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution: Wilkes: ☐ Wake: ☒ Peale: ☐

2019 survey distribution: Wilkes N: ☐ Wilkes S: ☐ Wake: ☒ Peale: ☐



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Hippeastrum* sp.

Plant Group: Monocots

Family: Amaryllidaceae

Life Form: herb

Species Code: HipSp

Synonym(s):

Common Name(s): amaryllis

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This ornamental species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Colocasia esculenta



Plant Group: Monocots

Family: Araceae

Life Form: herb

Species Code: ColEsc

Synonym(s):

Common Name(s): taro

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☐ 2019 Survey New in 2019 Survey? ☐

Comments:

Several plants in residential gardens. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☐

Wake: ☐

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

*Syngonium auritum*

Plant Group: Monocots

Family: Araceae

Life Form: vine

Species Code: SynAur

Synonym(s):

Common Name(s): syngonium, arrowhead vine

Status on Wake: cultivated

Wake Risk Assessment: low

 Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Although Herbst found it on Wake and Peale Islets in 1998, it was only seen on Wake in the 2019 survey.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Adonidia merrillii*

Plant Group: Monocots

Family: Arecaceae

Life Form: tree

Species Code: AdoMer

Synonym(s):

Common Name(s): Manila palm; Christmas palm

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

Herbst recorded an unknown palm in his 1998 survey but did not identify it; possibly it was this species, planted in several locations around buildings on Wake Islet and also at the Solid Waste Accumulation Area.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Cocos nucifera*

Plant Group: Monocots

Family: Arecaceae

Life Form: tree

Species Code: CocNuc

Synonym(s):

Common Name(s): coconut

Status on Wake: alien-naturalized

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐*Comments:*

There are several coconut trees that have been planted on both Wake and Peale Islets. This species, which is not native to Wake Atoll has the potential to expand to many other areas and even dominate the coastline.

*Herbst 1998 distribution:*Wilkes: ☒Wake: ☒Peale: ☒*2019 survey distribution:*Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Phoenix sp.



Plant Group: Monocots

Family: Arecaceae

Life Form: tree

Species Code: PhoSp

Synonym(s):

Common Name(s): date palm

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

While this introduced palm species is only found in a few places around residences on the northwest side of Wake Islet, it has the potential to spread to many other locations throughout the atoll.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Agave sisalana*

Plant Group: Monocots

Family: Asparagaceae

Life Form: shrub

Species Code: AgaSis

Synonym(s):

Common Name(s): sisal

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Planted as an ornamental around several residences on Wake Islet and near the old FAA facility on Peale, this highly invasive species has great potential for spread to many other areas.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Asparagus densiflorus



Plant Group: Monocots Family: Asparagaceae Life Form: shrub
 Species Code: AspDen Synonym(s):
 Common Name(s): asparagus fern

Status on Wake: cultivated Wake Risk Assessment: medium

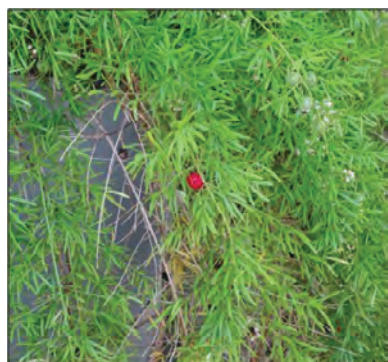
Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution: Wilkes: ☐ Wake: ☒ Peale: ☐

2019 survey distribution: Wilkes N: ☐ Wilkes S: ☐ Wake: ☒ Peale: ☐



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Wake Atoll Plant Photo Key From 2019 Survey

*Cordyline fruticosa*

Plant Group: Monocots

Family: Asparagaceae

Life Form: shrub

Species Code: CorFru

Synonym(s): *Cordyline terminalis*

Common Name(s): ti

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Wake Atoll Plant Photo Key From 2019 Survey



Sansevieria trifasciata



Plant Group: Monocots

Family: Asparagaceae

Life Form: herb

Species Code: SanTri

Synonym(s):

Common Name(s): snake plant, mother-in-law's tongue

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☐

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

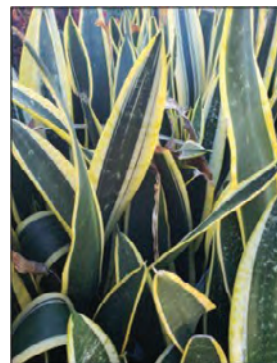
Wilkes S: ☐

Wake: ☒

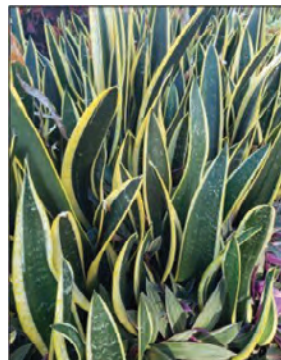
Peale: ☐



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Wake Atoll Plant Photo Key From 2019 Survey

*Aloe vera*

Plant Group: Monocots

Family: Asphodelaceae

Life Form: herb

Species Code: AloVer

Synonym(s):

Common Name(s): aloe

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

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Tradescantia spathacea



Plant Group: Monocots Family: Commelinaceae Life Form: herb

Species Code: TraSpa Synonym(s): *Rhoeo spathacea*

Common Name(s): oyster plant

Status on Wake: cultivated Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



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Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Cyperus alternifolius



Plant Group: Monocots

Family: Cyperaceae

Life Form: sedge

Species Code: CypAlt

Synonym(s):

Common Name(s): umbrellasedge

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Cyperus rotundus*

Plant Group: Monocots

Family: Cyperaceae

Life Form: sedge

Species Code: CypRot

Synonym(s):

Common Name(s): nutgrass, umbrella sedge

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is somewhat similar in appearance to other *Cyperus* species found on Wake but can be distinguished by the presence of nut-like corms on the roots.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Photograph: J. Jacobi, U.S. Geological Survey



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Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey



Fimbristylis cymosa



Plant Group: Monocots

Family: Cyperaceae

Life Form: sedge

Species Code: FimCym

Synonym(s):

Common Name(s): tropical fimbry

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This is a very common native species that is found throughout the atoll.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☒

Wilkes S: ☒

Wake: ☒

Peale: ☒



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Fimbristylis dichotoma*

Plant Group: Monocots

Family: Cyperaceae

Life Form: sedge

Species Code: FimDic

Synonym(s):

Common Name(s): forked fimbry

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This uncommon species is very difficult to distinguish from the native *F. cymosa* and can also be confused with *Cyperus rotundus*.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Egeria densa*

Plant Group: Monocots

Family: Hydrocharitaceae

Life Form: herb

Species Code: EgeDen

Synonym(s):

Common Name(s): Brazilian waterweed

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This aquatic plant grows only in a small contained water pond near a residence on Wake Islet and cannot spread beyond where it is actively maintained.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Musa acuminata*

Plant Group: Monocots

Family: Musaceae

Life Form: herb

Species Code: MusAcu

Synonym(s):

Common Name(s): Cavendish banana

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Banana plants are found in several of the gardens around residences. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Pandanus tectorius*

Plant Group: Monocots

Family: Pandanaceae

Life Form: tree

Species Code: PanTec

Synonym(s):

Common Name(s): hala, screwpine

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Although *Pandanus* is a genus found naturally on many Pacific islands, it is not native to Wake Atoll. It does have the potential to spread naturally away from areas where it has been planted.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Bothriochloa pertusa*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: BotPer

Synonym(s):

Common Name(s): pitted beardgrass

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This is a common small grass species that was found on Wake and Peale Islets. It is likely that it also occurs on the south portion of Wilkes Islet but was missed there in the 2019 survey.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Cenchrus echinatus*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: CenEch

Synonym(s):

Common Name(s): sandbur

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This very invasive small grass with spiky burr seeds is established in many locations on Peale, Wake, and the south part of Wilkes Islets. It has the potential to spread widely since its seeds are easily transported on clothing and other personal gear.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Chloris barbata



Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: ChlBar

Synonym(s): *Chloris inflata*

Common Name(s): swollen fingergrass

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This is a moderate-sized grass that colonizes open, disturbed areas.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey



Cynodon dactylon



Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: CynDac

Synonym(s):

Common Name(s): Bermuda grass

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species of grass does not grow very well in relatively dry sites but can dominate areas that have some added moisture, such as near buildings or other managed areas.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Dactyloctenium aegyptium*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: DacAeg

Synonym(s):

Common Name(s): beach wiregrass, crowfoot grass

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was found to be common in many open areas on all of the islets on the atoll.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☒Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Eleusine indica*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: EleInd

Synonym(s):

Common Name(s): Indian goosegrass, wiregrass

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was documented by Herbst in 1998 on all of the islets on Wake Atoll. Although it was only recorded on Wilkes N and Wake during the 2019 survey, it was likely missed on Peale at that time.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Eragrostis amabilis*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: EraAma

Synonym(s): *Eragrostis tenella*

Common Name(s): Japanese lovegrass

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was documented by Herbst in 1998 on all of the islets on Wake Atoll. Although it was only recorded on Wilkes S and Wake during the 2019 survey, it was likely missed on Peale at that time.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Eragrostis scabriflora*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: EraSca

Synonym(s):

Common Name(s): no common name

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

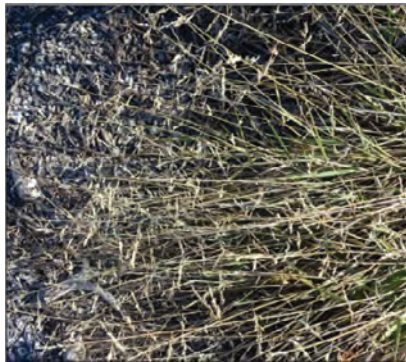
Comments:

This introduced grass was found to be common on all islets on Wake Atoll.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Eustachys petraea*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: EusPet

Synonym(s):

Common Name(s): pinewoods fingergrass

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was found to be common on all islets on Wake Atoll.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Lepturus repens



Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: LepRep

Synonym(s): *Lepturus gasparricensis*

Common Name(s): Pacific Island thintail

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native grass was found to be common on all islets on Wake Atoll, particularly along the shorelines as well as growing as a dense mat under the open *Heliotropium foertherianum* woodland on Peale Islet.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☒

Wilkes S: ☒

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Paspalum scrobiculatum*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: PasScr

Synonym(s): *Paspalum auriculatum*, *P. cartilagineum*

Common Name(s): ricegrass, Kodo millet

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was not recorded by Herbst in either 1994 or 1998 but was found to be uncommon on both Wake and Peale Islets during the 2019 survey.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey



Paspalum setaceum



Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: PasSet

Synonym(s):

Common Name(s): thin paspalum, fringeleaf paspalum

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was found to be uncommon on both Wake and Peale Islets by Herbst in 1994 and 1998 as well as during the 2019 survey.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☒

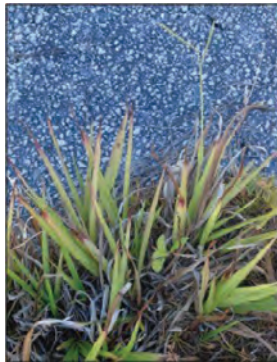
2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Zoysia matrella*

Plant Group: Monocots

Family: Poaceae

Life Form: grass

Species Code: ZoyMat

Synonym(s):

Common Name(s): Manila grass

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced grass was only found around some of the administration and residence buildings on the northwest side of Wake Islet where it was apparently planted.

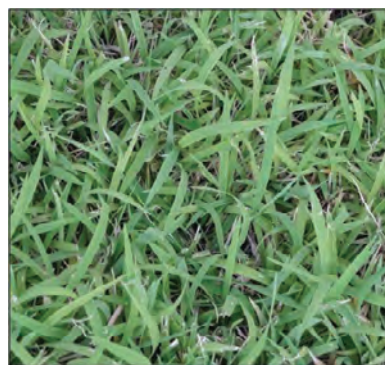
Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

*Strelitzia reginae*

Plant Group: Monocots

Family: Strelitziaceae

Life Form: large herb

Species Code: StrReg

Synonym(s):

Common Name(s): bird-of-paradise

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Alpinia galanga



Plant Group: Monocots Family: Zingiberaceae Life Form: large herb

Species Code: AlpGal Synonym(s):

Common Name(s): galanga, Thai ginger, blue ginger

Status on Wake: cultivated Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution: Wilkes: ☐ Wake: ☒ Peale: ☐

2019 survey distribution: Wilkes N: ☐ Wilkes S: ☐ Wake: ☒ Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Araucaria heterophylla



Plant Group: Gymnosper

Family: Araucariaceae

Life Form: tree

Species Code: AraHet

Synonym(s):

Common Name(s): Norfolk Island pine

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Several trees were found to be growing on Wake Islet near the residence and administration buildings.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☐

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Phymatosorus scolopendria



Plant Group: Ferns

Family: Polypodiaceae

Life Form: fern

Species Code: PhySco

Synonym(s):

Common Name(s): laua'e fern, wart fern

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This fern species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☐

Peale: ☐

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



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Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Psilotum nudum*

Plant Group: Ferns

Family: Psilotaceae

Life Form: fern

Species Code: PsiNud

Synonym(s):

Common Name(s): moa; wiskfern

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This primitive fern ally was found growing in only one spot at the base of one of the residence buildings on Wake Islet where there appeared to be some moisture accumulation. It is not expected to spread beyond this point.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



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Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Pseuderanthemum carruthersii



Plant Group: Dicots

Family: Acanthaceae

Life Form: shrub

Species Code: PseCar

Synonym(s): *Pseuderanthemum carruthersii* var. *carruthersii*

Common Name(s): Carruthers' falseface; yellow-veined Eranthemum

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey



Pseuderanthemum carruthersii var. *atropurpureum*



Plant Group: Dicots

Family: Acanthaceae

Life Form: shrub

Species Code: PseCarAtr

Synonym(s): *Pseuderanthemum carruthersii* var. *atropurpureum*

Common Name(s): purple false Eranthemum

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Sesuvium portulacastrum



Plant Group: Dicots

Family: Aizoaceae

Life Form: herb

Species Code: SesPor

Synonym(s):

Common Name(s): shoreline seapurslane; `akulikuli

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native succulent plant was found to be common around wetland sites and other locations near the shoreline on Wake and Peale Islets.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☒



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Amaranthus blitum*

Plant Group: Dicots

Family: Amaranthaceae

Life Form: herb

Species Code: AmaBli

Synonym(s): *Amaranthus viridis*

Common Name(s): purple amaranth, sender amaranth

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This weedy herb was not seen by Herbst in his 1994 or 1998 surveys, but it was found on both Wilkes (S) and Wake Islets in 2019.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Amaranthus dubius

Plant Group: Dicots

Family: Amaranthaceae

Life Form: herb



Species Code: AmaDub

Synonym(s):

Common Name(s): spleen amaranth, red spinach

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This weedy herb was seen by Herbst in his 1994 or 1998 surveys and was also found on both Wilkes (S) and Wake Islets in 2019.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: Edwin G. Más and María de L. Lugo-Torres, courtesy of Smithsonian Institution



Photograph: Warren L. Wagner, courtesy of Smithsonian Institution



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey



Amaranthus graecizans



Plant Group: Dicots

Family: Amaranthaceae

Life Form: herb

Species Code: AmaGra

Synonym(s):

Common Name(s): Mediterranean amaranth, short-tepalled pigweed

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This weedy herb was first recorded by Fosberg and Sachet in 1969 but not seen by Herbst in his 1994 or 1998 surveys; however, it was found only on Wake Islet in 2019.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Adenium obesum*

Plant Group: Dicots

Family: Apocynaceae

Life Form: shrub

Species Code: AdeObe

Synonym(s):

Common Name(s): desert rose

Status on Wake: cultivated

Wake Risk Assessment: low

 Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This small woody ornamental plant was recorded where during the 2019 survey where it had apparently been planted on both Wake and Peale Islets.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

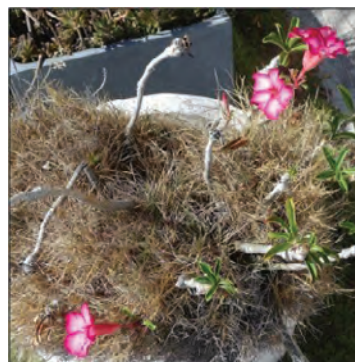
Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Catharanthus roseus*

Plant Group: Dicots

Family: Apocynaceae

Life Form: herb

Species Code: CatRos

Synonym(s):

Common Name(s): periwinkle, Madagascar periwinkle

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Nerium oleander*

Plant Group: Dicots

Family: Apocynaceae

Life Form: shrub

Species Code: NerOle

Synonym(s):

Common Name(s): oleander

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



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Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Plumeria obtusa*

Plant Group: Dicots

Family: Apocynaceae

Life Form: tree

Species Code: PluObt

Synonym(s):

Common Name(s): plumeria, frangipani

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Plumeria rubra

Plant Group: Dicots

Family: Apocynaceae

Life Form: tree

Species Code: PluRub

Synonym(s):

Common Name(s): common frangipani, red frangipani

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



*Polyscias fruticosa*

Plant Group: Dicots

Family: Araliaceae

Life Form: shrub

Species Code: PolFru

Synonym(s):

Common Name(s): Mingaralia

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Polyscias guilfoylei



Plant Group: Dicots

Family: Araliaceae

Life Form: shrub

Species Code: PolGui

Synonym(s):

Common Name(s): panax, geranium aralia

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Polyscias scutellaria*

Plant Group: Dicots

Family: Araliaceae

Life Form: shrub

Species Code: PolScu

Synonym(s):

Common Name(s): shield aralia, plum aralia

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Schefflera actinophylla



Plant Group: Dicots

Family: Araliaceae

Life Form: tree

Species Code: SchAct

Synonym(s): *Brassaia actinophylla*

Common Name(s): octopus tree, umbrella tree

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Bidens alba*

Plant Group: Dicots

Family: Asteraceae

Life Form: herb

Species Code: BidAlb

Synonym(s):

Common Name(s): beggarticks, Spanish needles

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This highly invasive herb in the sunflower family was found to be widespread on both Wake and the south part of Wilkes Islets during the 2019 survey, although Herbst also documented it from Peale Islet in 1998. In previous lists this species has been identified as *Bidens pilosa* var. *minor*.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Erigeron canadensis



Plant Group: Dicots

Family: Asteraceae

Life Form: herb

Species Code: EriCan

Synonym(s): *Conyza canadensis*

Common Name(s): Canada fleabane, horseweed

Status on Wake: alien-naturalized

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This is a very common weedy herb species that is found throughout the atoll. However, it is currently only found in a few small areas on the north section of Wilkes Islet.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☒

Wilkes S: ☒

Wake: ☒

Peale: ☒


Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Pluchea carolinensis*

Plant Group: Dicots

Family: Asteraceae

Life Form: shrub

Species Code: PluCar

Synonym(s):

Common Name(s): sourbush, fleabane

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This highly invasive introduced shrub was found on all of the islets by both Herbst in 1994 and 1998, as well as during the 2019 survey. However, it was not very abundant on the north part of Wilkes Islet and potentially could be eradicated there.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Tridax procumbens*

Plant Group: Dicots

Family: Asteraceae

Life Form: herb

Species Code: TriPro

Synonym(s):

Common Name(s): coatbuttons, tridax daisy

Status on Wake: alien-invasive

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

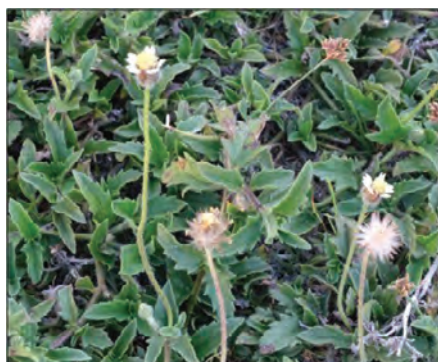
Comments:

Herbst found this small introduced herb to be common on all of the islets during his 1994 and 1998 surveys. However, it was only recorded on Wake and Peale during the 2019 survey.

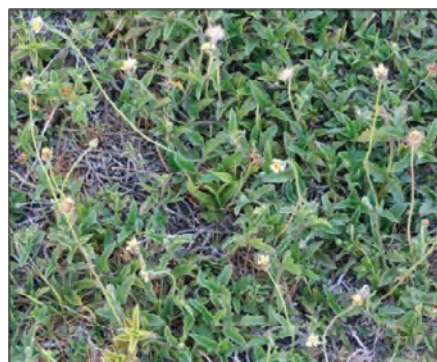
Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Tabebuia aurea*

Plant Group: Dicots

Family: Bignoniaceae

Life Form: tree

Species Code: TabAur

Synonym(s): *Tabebuia argentea*

Common Name(s): silver trumpet-tree

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This introduced tree was only found planted in the residence area on the northwest part of Wake Islet. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Brassica nigra*

Plant Group: Dicots

Family: Brassicaceae

Life Form: herb

Species Code: BraNig

Synonym(s):

Common Name(s): black mustard

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This weedy mustard species has only been documented growing in disturbed sites on Wake Islet.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Lepidium bidentatum*

Plant Group: Dicots

Family: Brassicaceae

Life Form: herb

Species Code: LepBid

Synonym(s):

Common Name(s): pepperwort

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small native shrub was found growing on the north part of Wilkes Islet and in a few locations on Peale. It is extremely abundant locally, particularly where it is found near in and adjacent to the Bird Sanctuary on Peale Islet.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☐Wake: ☐Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Nopalea cochenillifera



Plant Group: Dicots

Family: Cactaceae

Life Form: shrub

Species Code: NopCoc

Synonym(s): *Opuntia cochenillifera*

Common Name(s): cochinitilla cactus

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This potentially invasive species of cactus was found growing in a few sites around the residential area on the northwest part of Wake Islet as well as in a few locations along the central "road" that runs through the center of Peale Islet. It is likely that this species will be able to spread to more locations on Peale and the other islets if not controlled.

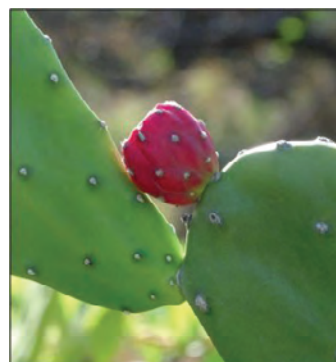
Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Opuntia littoralis*

Plant Group: Dicots

Family: Cactaceae

Life Form: shrub

Species Code: OpuLit

Synonym(s):

Common Name(s): coastal prickly pear cactus

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This potentially invasive species of this cactus was found growing in just one location along the central "road" that runs through the center of Peale Islet. It is likely that this species will be able to spread to more locations on Peale and the other islets if not controlled.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☐Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Carica papaya*

Plant Group: Dicots

Family: Caricaceae

Life Form: tree

Species Code: CarPap

Synonym(s):

Common Name(s): papaya

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Casuarina equisetifolia



Plant Group: Dicots

Family: Casuarinaceae

Life Form: tree

Species Code: CasEqu

Synonym(s):

Common Name(s): Ironwood; Australian pine tree

Status on Wake: alien-invasive

Wake Risk Assessment: high

 Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This tall introduced tree is a highly invasive species that can completely dominate the vegetation where it becomes established. This species was found on all of the islets on Wake Atoll and appears able to continue to spread without management. An intensive effort to control this species was evident on Peale Islet during the 2019 survey as well in selected areas on Wake and Wilkes Islets.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Gynandropsis gynandra*

Plant Group: Dicots

Family: Cleomaceae

Life Form: herb

Species Code: GynGyn

Synonym(s): *Cleome gynandra*

Common Name(s): African spider-flower

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This highly invasive herb was found to be locally common in several sites on Wake and Peale Islets during the 2019 survey. Although not seen there in 2019, there is apparently a small population of this plant on the north part of Wilkes Islet. This species may still be able to be controlled and stopped from spreading to other areas on the atoll.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Terminalia catappa*

Plant Group: Dicots

Family: Combretaceae

Life Form: tree

Species Code: TerCat

Synonym(s):

Common Name(s): Indian almond, false kamani

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This large tree species was found growing in several locations near the residential area at the northwest part of Wake Islet. It appears to be reproducing naturally and has the potential to continue to spread throughout this coastal habitat if not controlled.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Cuscuta pentagona*

Plant Group: Dicots

Family: Convolvulaceae

Life Form: vine

Species Code: CusPen

Synonym(s):

Common Name(s): fiveangled dodder

Status on Wake: alien-naturalized

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☐ 2019 Survey New in 2019 Survey? ☐

Comments:

This native vine was not documented during the 2019 survey, but Herbst found it on Wake Islet during his 1998 survey. This species is generally found growing in the vegetation along coastlines on other islands in the Pacific, including Hawai'i. Note: the photos shown on this page are of a related species (*Cuscuta sandwichiana*) from Hawai'i but show the general growth-form of this plant.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☐Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Ipomoea pes-caprae subsp. *Brasiliensis*



Plant Group: Dicots

Family: Convolvulaceae

Life Form: vine

Species Code: IpoPesBra

Synonym(s):

Common Name(s): beach morning-glory, pohuehue; puhuehue

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native vine was found to be very common along the ocean-facing shorelines of Wilkes, Wake, and Peale Islets during all past surveys.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☒

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Ipomoea violacea*

Plant Group: Dicots

Family: Convolvulaceae

Life Form: vine

Species Code: IpoVio

Synonym(s): *Ipomoea tuba*

Common Name(s): beach moon-flower, heavenlyblue morning-glory

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native vine was found to be very common growing in inland sites on Wilkes, Wake, and Peale Islets during all past surveys.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Kalanchoe delagoensis*

Plant Group: Dicots

Family: Crassulaceae

Life Form: herb

Species Code: KalDel

Synonym(s):

Common Name(s): chandelier plant

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced ornamental species has primarily been planted around buildings and beach houses on Wake and Peale Islets. It definitely has the potential to spread much more away from cultivation with time.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Kalanchoe pinnata*

Plant Group: Dicots

Family: Crassulaceae

Life Form: herb

Species Code: KalPin

Synonym(s):

Common Name(s): air plant, cathedral bells

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This succulent herb is highly invasive and has the potential to expand its range greatly if not controlled. It has so far only been located in a few locations on Wake Islet including the industrial area and near the residence areas on Wake Islet.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Coccinia grandis*

Plant Group: Dicots

Family: Cucurbitaceae

Life Form: vine

Species Code: CocGra

Synonym(s):

Common Name(s): ivy gourd

Status on Wake: cultivated

Wake Risk Assessment: high

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced, highly invasive vine has been considered noxious in Hawai'i. It was only found growing as an ornamental in one residential site on the northwest part of Wake Islet. It has great potential for spread if it is dispersed elsewhere on Wake.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Cordia subcordata*

Plant Group: Dicots

Family: Ehretiaceae

Life Form: tree

Species Code: CorSub

Synonym(s):

Common Name(s): kou

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native tree with bright orange flowers was found occasionally growing in many inland sites on all of the islets on Wake Atoll. It was formerly more abundant based on Fosberg's accounts in the 1960s.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Codiaeum variegatum*

Plant Group: Dicots

Family: Euphorbiaceae

Life Form: shrub

Species Code: CodVar

Synonym(s):

Common Name(s): garden croton or variegated croton

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

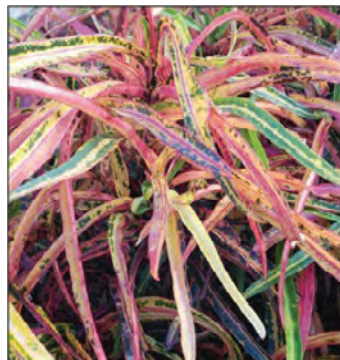
2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Euphorbia heterophylla var. *cyathophora*



Plant Group: Dicots

Family: Euphorbiaceae

Life Form: herb

Species Code: EupHetCya

Synonym(s): *Euphorbia cyathophora*

Common Name(s): dwarf poinsettia, wild poinsettia

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced wild poinsettia was found growing on Wake and Peale Islets during all previous surveys. It has the potential to become more abundant if not controlled.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Euphorbia hirta*

Plant Group: Dicots

Family: Euphorbiaceae

Life Form: herb

Species Code: EupHir

Synonym(s): *Chamaesyce hirta*

Common Name(s): hairy spurge, garden spurge

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small herb is widespread and relatively common, particularly in disturbed areas on all of the islets on the atoll.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Euphorbia hypericifolia



Plant Group: Dicots

Family: Euphorbiaceae

Life Form: shrub

Species Code: EupHyp

Synonym(s): *Euphorbia hypericifolia*, *Euphorbia glomerifera*

Common Name(s): graceful spurge

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This more upright growing introduced herb was found growing in several locations on all three islets, but only on the south part of Wilkes during the 2019 survey. This weedy plant has the potential to continue to spread if not controlled.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☐

Peale: ☒

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☒

Wake: ☒

Peale: ☒


Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Euphorbia prostrata



Plant Group: Dicots

Family: Euphorbiaceae

Life Form: herb

Species Code: EupPro

Synonym(s): *Chamaesyce prostrata*

Common Name(s): prostrate purge or prostrate sandmat

Status on Wake: alien-invasive

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced herb was found growing in more disturbed sites on Wake Islet, although Herbst reported seeing it on Peale Islet in 1994.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Euphorbia thymifolia



Plant Group: Dicots

Family: Euphorbiaceae

Life Form: herb

Species Code: EupThy

Synonym(s): *Chamaesyce thymifolia*

Common Name(s): chickenweed

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced herb was found growing only in a few disturbed sites on Wake Islet in both 1994 and during the 2019 survey.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Jatropha integerrima*

Plant Group: Dicots

Family: Euphorbiaceae

Life Form: shrub

Species Code: JatInt

Synonym(s):

Common Name(s): rose-flowered jatropha

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This ornamental tree species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Bauhinia sp.*

Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: BauSp

Synonym(s):

Common Name(s): orchid tree

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This ornamental tree species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Caesalpinia bonduc*

Plant Group: Dicots

Family: Fabaceae

Life Form: vine

Species Code: CaeBon

Synonym(s):

Common Name(s): grey nicker, nicker bean, kakalaoa

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☐ 2019 Survey New in 2019 Survey? ☐

Comments:

This native vine has only been documented by Herbst in 1998. This vine is very distinctive in that its stems have curved spines; it has relatively flat prickly pods, and its grey seeds are hard and round like marbles.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☐Peale: ☐

Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Dalea emarginata*

Plant Group: Dicots

Family: Fabaceae

Life Form: herb

Species Code: DalEma

Synonym(s):

Common Name(s): wedgeleaf prairie clover

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This small herb was not recorded during the previously published surveys of Wake Atoll. However, it was found and identified by M. Waite and J. Gilardi in the early 2000s. This plant is very easy to detect when it is flowering.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Gilardi, Island Conservation



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Delonix regia*

Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: DelReg

Synonym(s):

Common Name(s): poinciana, flame tree

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐*Comments:*

This tall tree with bright red flowers has been planted in several locations around the residence area on the northwest part of Wake Islet as well as behind the Solid Waste Accumulation Area. It is not clear if it is able to spread naturally on Wake.

*Herbst 1998 distribution:*Wilkes: ☐Wake: ☒Peale: ☐*2019 survey distribution:*Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Desmanthus pernambucanus*

Plant Group: Dicots

Family: Fabaceae

Life Form: shrub

Species Code: DesPer

Synonym(s):

Common Name(s): wild tantan, dwarf koa

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced shrub was found on Wake and Peale Islets during the 2019 survey. It has compound leaves, similar to *Desmanthus virgatus* and also to *Leucaena leucocephala*. However, it can be distinguished by the bright red structures at the base of most leaf petioles (stems).

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Desmanthus virgatus*

Plant Group: Dicots

Family: Fabaceae

Life Form: shrub

Species Code: DesVir

Synonym(s):

Common Name(s): wild tantan, dwarf koa

Status on Wake: alien-invasive

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced shrub in the legume family often grows taller than *Desmanthus pernambucanus* and has long dark red to blackish seed pods. This weedy plant was found to be reproducing and spreading on the lagoon side of the industrial area as well as behind the Solid Waste Accumulation Area on Wake Islet.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Gliricidia sepium*

Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: GliSep

Synonym(s):

Common Name(s): Gliricidia

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

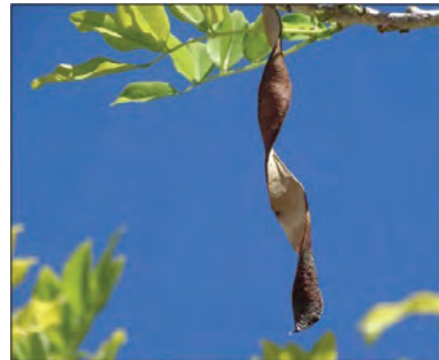
Comments:

This introduced ornamental tree was only found growing near a residence on the northwest part of Wake Islet. It has a long brown pod that often is twisted and remains on the tree after its seeds have been shed.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Leucaena leucocephala*

Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: LeuLeu

Synonym(s):

Common Name(s): koa haole, tangantangan, lead tree

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This highly invasive legume was recorded from both Peale and Wake Islets by Fosberg and Sachet in the 1960s and also found there in subsequent surveys. This tall shrub/small tree has the potential to spread throughout most of the inland sites on Wake Atoll and completely dominate the native vegetation.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Pithecellobium dulce



Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: PitDul

Synonym(s):

Common Name(s): opiuma, Manila tamarind

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This tree has been planted in two locations, one on Peale Islet and the other at a beach house on Wake Islet. It has a distinctive pink seed pod and the leaves are arranged in twos, appearing to be cleft. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☒

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Samanea saman*

Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: SamSam

Synonym(s): *Albizia saman*

Common Name(s): monkeypod

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This large tree had not been recorded in previous surveys. Several large trees were found near residences on the northwest side of Wake Islet as well as a few smaller individuals in pots in the resident apartment area.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Sesbania grandiflora



Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: SesGra

Synonym(s):

Common Name(s): hummingbird tree, scarlet wisteria

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This legume tree/shrub was found planted in many locations near the residences on Wake Islet. It has large white flowers and long green/brown seedpods. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Tamarindus indica*

Plant Group: Dicots

Family: Fabaceae

Life Form: tree

Species Code: TamInd

Synonym(s):

Common Name(s): tamarind

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Tamarind tree was found during the 2019 survey growing by the residence area on the northwest part of Wake Islet and on Peale. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Scaevola sericea



Plant Group: Dicots

Family: Goodeniaceae

Life Form: shrub

Species Code: ScaSer

Synonym(s): *Scaevola sericea* var. *taccada*, *S. taccada*

Common Name(s): beach naupaka, naupaka kahakai

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native shrub is very common throughout the Pacific islands where it colonizes coastal lowland sites, particularly just above the high-tide line. Although it was found only in a few locations on Wake and the southern part of Wilkes Islets, it was likely much more widely distributed throughout the atoll prior to human disturbance.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Euploca procumbens var. *depressum*



Plant Group: Dicots

Family: Heliotropiaceae

Life Form: herb

Species Code: EupProDep

Synonym(s): *Heliotropium procumbens* var. *depressum*

Common Name(s): fourspike heliotrope

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced shrub is widely distributed on all of the islets on Wake Atoll. It has small white flowers on scorpion-like floral spikes and its leaves have long white hairs on both sides of the leaves.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☐

2019 survey distribution:

Wilkes N: ☐

Wilkes S: ☒

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

*Heliotropium anomalum*

Plant Group: Dicots

Family: Heliotropiaceae

Life Form: herb



Species Code: HelAno

Synonym(s):

Common Name(s): hinahina, Polynesian heliotrope

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native herb is related to the tall *Heliotropium foertherianum* trees that form the dominant tree canopy in most of the relatively undisturbed or recovering sites throughout the atoll. This plant was only found in two locations on the south and northwest parts of Wake Islet. It was likely much more abundant in the past but is sensitive to disturbance.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☐2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Heliotropium foertherianum



Plant Group: Dicots

Family: Heliotropiaceae

Life Form: tree

Species Code: HelFoe

Synonym(s): *Tournefortia argentea*

Common Name(s): tree heliotrope, octopus bush

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native tree is the dominant species throughout the undisturbed or recovering areas on all of the islets on Wake Atoll. It forms an open to closed canopy from shoreline up to the most inland sites; however, the understory is generally relatively open with either a grass or scattered shrub layer under the trees.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Vitex trifolia*

Plant Group: Dicots

Family: Lamiaceae

Life Form: shrub

Species Code: VitTri

Synonym(s):

Common Name(s): blue vitex

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small tree has been planted as an ornamental near a few residences on both Wake and Peale Islets. It has distinctive purple-violet flowers and light-colored undersides of the leaves.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Gilardi, Island Conservation



Photograph: J. Gilardi, Island Conservation



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Barringtonia asiatica*

Plant Group: Dicots

Family: Lecythidaceae

Life Form: tree

Species Code: BarAsi

Synonym(s):

Common Name(s): fish poison tree

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This tall tree has a very distinctive large top-shaped fruit and bright white inflorescences with pink tinges on the ends of the stamens. Only one small tree was found near a residence on the northwest part of Wake Islet. It is not clear if it has the potential to spread on the atoll.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Pemphis acidula*

Plant Group: Dicots

Family: Lythraceae

Life Form: shrub

Species Code: PemAci

Synonym(s):

Common Name(s): pemphis

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native shrub forms a dominant band of vegetation particularly around the lagoon-side shores of the three islets, except where this habitat has been heavily disturbed. It has very distinctive stiff, dark green leaves and bright white flowers.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Abutilon indicum subsp. *albescens*



Plant Group: Dicots

Family: Malvaceae

Life Form: shrub

Species Code: AbulndAlb

Synonym(s): *Abutilon asiaticum* var. *albescens*

Common Name(s): Indian mallow

Status on Wake: alien-naturalized

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced shrub has been recorded on Wake and Peale islets ever since the 1960s. Although its weed risk is considered to be low in the literature, it appears to be spreading in several areas on the atoll and could be problematic if not controlled.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Gossypium stephensii



Plant Group: Dicots

Family: Malvaceae

Life Form: shrub

Species Code: GosSte

Synonym(s):

Common Name(s): Wake Island cotton

Status on Wake: endemic

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native cotton is the only plant species that is endemic to Wake Atoll (i.e., found nowhere else). It has large maple-like leaves that are covered with small white hairs. The large showy flower is white with patches of red-orange at the base of each petal; its fruit is a capsule that contains white cotton fibers that remain attached to the capsule after it opens. This species appears to be easily spreading into formerly disturbed areas.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Gilardi, Island Conservation



Photograph: J. Gilardi, Island Conservation

Wake Atoll Plant Photo Key From 2019 Survey

*Hibiscus* hybrid

Plant Group: Dicots

Family: Malvaceae

Life Form: shrub

Species Code: HibHyb

Synonym(s):

Common Name(s): Hibiscus

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Several different varieties of *Hibiscus* were found to be planted around residence and administrative buildings on both Wake and Peale Islets. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Sida ciliaris*

Plant Group: Dicots

Family: Malvaceae

Life Form: herb



Species Code: SidCil

Synonym(s):

Common Name(s): fringed Sida

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y*Comments:*

This small introduced woody herb in the Hibiscus family was not documented during previous published surveys but was identified by M. Waite and J. Gilardi during the 2000s. It can be distinguished by its small reddish-orange flower. It was found in a few sites near the industrial area and the residential area on Wake Islet during the 2019 survey.

*Herbst 1998 distribution:*Wilkes: ☐Wake: ☐Peale: ☐*2019 survey distribution:*Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Sida fallax*

Plant Group: Dicots

Family: Malvaceae

Life Form: shrub

Species Code: SidFal

Synonym(s):

Common Name(s): ilima

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native shrub in the Hibiscus family is very widespread on all of the islets on Wake Atoll. It has very recognizable yellow-orange flowers and silvery-green foliage. It can be found growing in both natural and undisturbed sites, generally forming a scattered understory layer.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Talipariti tiliaceum*

Plant Group: Dicots

Family: Malvaceae

Life Form: tree

Species Code: TalTil

Synonym(s): *Hibiscus tiliaceus*

Common Name(s): hau, sea hibiscus

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐*Comments:*

This small tree is native to many Pacific islands but is not known to naturally occur on Wake Atoll. It was found planted in just one site near a beach house on the lagoon side of Wake Islet. It is considered to be a moderate weed risk in areas like Hawai'i and has the potential to naturally spread in the few wetland areas and along the lagoon sides of the three islets on Wake.

*Herbst 1998 distribution:*Wilkes: ☐Wake: ☒Peale: ☐*2019 survey distribution:*Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Thespesia populnea*

Plant Group: Dicots

Family: Malvaceae

Life Form: tree

Species Code: ThePop

Synonym(s):

Common Name(s): milo

Status on Wake: cultivated

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced tree in the Hibiscus family is considered to be a high weed risk and has the potential to spread to many areas on Wake Atoll if not controlled. It was found only in a few sites on Wake Islet during the 2019 survey but was also previously reported from Peale Islet.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Forest and Kim Starr, Star Environmental

Wake Atoll Plant Photo Key From 2019 Survey

*Waltheria indica*

Plant Group: Dicots

Family: Malvaceae

Life Form: herb

Species Code: WalInd

Synonym(s):

Common Name(s): uhaloa

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native shrub was recorded on all of the islets during the 2019 plant survey. It can be found in both disturbed and undisturbed sites and forms part of the native understory along with *Sida fallax* and several other small shrub species.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Warren L. Wagner, courtesy of Smithsonian Institution

Wake Atoll Plant Photo Key From 2019 Survey

*Ficus benghalensis*

Plant Group: Dicots

Family: Moraceae

Life Form: tree

Species Code: FicBen

Synonym(s):

Common Name(s): banyan

Status on Wake: cultivated

Wake Risk Assessment: low

 Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y
Comments:

This introduced species in the fig family was found only planted near one residence on the northwest part of Wake Islet. Although many fig species are considered to be highly invasive elsewhere, the dry habitat will likely limit the distribution and impact of these species on Wake Atoll.

*Herbst 1998 distribution:*Wilkes: ☐Wake: ☐Peale: ☐*2019 survey distribution:*Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Ficus carica*

Plant Group: Dicots

Family: Moraceae

Life Form: tree

Species Code: FicCar

Synonym(s):

Common Name(s): edible fig

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced edible fig species was found growing in a few sites near residences on the northwest part of Wake Islet. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Ficus microcarpa*

Plant Group: Dicots

Family: Moraceae

Life Form: tree

Species Code: FicMic

Synonym(s):

Common Name(s): Chinese banyan, Indian laurel fig

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced species in the fig family was found only planted near one residence on the northwest part of Wake Islet and at Peale Islet. Although many fig species are considered to be highly invasive elsewhere, the dry habitat will likely limit the distribution and impact of these species on Wake Atoll.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Psidium guajava

Plant Group: Dicots

Family: Myrtaceae

Life Form: tree

Species Code: PsiGua

Synonym(s):

Common Name(s): common guava, lemon guava

Status on Wake: cultivated

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced shrub/small tree is considered to be invasive in Hawai'i and many other areas in the Pacific. It definitely has the potential to spread to many areas on Wake Atoll but currently lacks a means for dispersal (fruit-eating birds). Only one plant was recorded during the 2019 survey near a residence on the northwest part of Wake Islet. This species should be considered for removal to reduce its potential threat.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



*Boerhavia albiflora*

Plant Group: Dicots

Family: Nyctaginaceae

Life Form: herb

Species Code: BoeAlb

Synonym(s):

Common Name(s): spiderling

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Three species of *Boerhavia* were recorded on Wake Atoll during the 2019 survey. One species was identified as *B. albiflora* based on its leaf and flower characteristics. It was found only on Peale Islet during this survey. This species was not previously recorded by either Fosberg or Herbst during their earlier surveys.

Herbst 1998 distribution:

Wilkes:

Wake:

Peale:

2019 survey distribution:

Wilkes N:

Wilkes S:

Wake:

Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Gilardi, Island Conservation



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Boerhavia coccinea*

Plant Group: Dicots

Family: Nyctaginaceae

Life Form: herb

Species Code: BoeCoc

Synonym(s):

Common Name(s): scarlet spiderling

Status on Wake: alien-naturalized

Wake Risk Assessment: native species

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

Three species of *Boerhavia* were recorded on Wake Atoll during the 2019 survey. One species, not previously recorded, was identified as *B. coccinea* based on its leaf and flower characteristics. It was found only on Wake Islet during this survey.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Boerhavia repens*

Plant Group: Dicots

Family: Nyctaginaceae

Life Form: herb

Species Code: BoeRep

Synonym(s):

Common Name(s): red spiderling, hogweed

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Three species of *Boerhavia* were recorded on Wake Atoll during the 2019 survey. One species (described here) was keyed out to be *B. repens* based on its leaf and flower characteristics. It was found on Wake and Wilkes Islets during this survey. This species was previously recorded by both Fosberg and Herbst during their earlier surveys.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☐Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Bougainvillea spectabilis



Plant Group: Dicots

Family: Nyctaginaceae

Life Form: shrub

Species Code: BouSpe

Synonym(s):

Common Name(s): bougainvillea

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This showy introduced ornamental was found planted in many sites near residences or other buildings on both Wake and Peale Islets. Although it generally seems to not spread beyond where it was planted, numerous seedlings and small plants were found growing near older planted individuals near the "golf course" building on Wake Islet.

Herbst 1998 distribution:

Wilkes: ☐

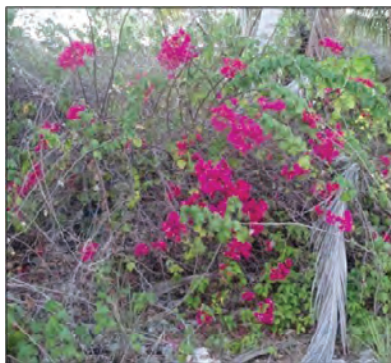
Wake: ☒

Peale: ☒

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☐

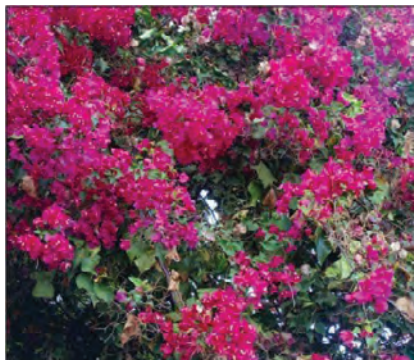
Wake: ☒

Peale: ☒


Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Pisonia grandis*

Plant Group: Dicots

Family: Nyctaginaceae

Life Form: tree

Species Code: PisGra

Synonym(s):

Common Name(s): papalakepau

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native tree was found growing among the *Heliotropium* and *Cordia* trees on all of the islets during the 2019 survey. Fosberg reported that it was previously much more abundant in the early 1960s, but many trees were destroyed during clearing of its habitat. This species has very distinctively sticky seed pods.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Nymphaea sp.*

Plant Group: Dicots

Family: Nymphaeaceae

Life Form: aquatic herb

Species Code: NymSp

Synonym(s):

Common Name(s): lotus, waterlily

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Introduced waterlilies were only found growing in small container ponds sited near a few residences on Wake Islet. Although this species can be invasive in other areas, habitat does not exist for it to expand into beyond cultivated sites on Wake Atoll.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Jasminum sambac*

Plant Group: Dicots

Family: Oleaceae

Life Form: shrub

Species Code: JasSam

Synonym(s):

Common Name(s): Arabian jasmine, Sambac jasmine

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced ornamental shrub was found planted in a few sites on the northwest part of Wake Islet. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Passiflora foetida var. *hispida*



Plant Group: Dicots

Family: Passifloraceae

Life Form: vine

Species Code: PasFoeHis

Synonym(s):

Common Name(s): passion fruit, scarletfruit passionflower

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced vine in the passion fruit family was found to be established in a few wild sites on both Wake and Wilkes (south) Islets. This species is considered to be highly invasive and can spread over and smother the ground vegetation if not controlled.

Herbst 1998 distribution:

Wilkes: ☒

Wake: ☒

Peale: ☐

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☒

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Gilardi, Island Conservation



Photograph: J. Gilardi, Island Conservation

Wake Atoll Plant Photo Key From 2019 Survey

*Phyllanthus acidus*

Plant Group: Dicots

Family: Phyllanthaceae

Life Form: shrub

Species Code: PhyAci

Synonym(s):

Common Name(s): Otaheite gooseberry

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced ornamental tree was found planted near residence and administration buildings on the northwest part of Wake Islet. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Phyllanthus amarus



Plant Group: Dicots

Family: Phyllanthaceae

Life Form: shrub

Species Code: PhyAma

Synonym(s):

Common Name(s): hurricane weed, carry me seed

Status on Wake: alien-invasive

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced weedy herb was found on all of the islets during the 2019 Wake Atoll survey. Although it was found to be widespread, it does not form much vegetative cover and is a low weed risk species.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☐

Peale: ☐

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☒

Wake: ☒

Peale: ☒



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Coccoloba uvifera*

Plant Group: Dicots

Family: Polygonaceae

Life Form: tree

Species Code: CocUvi

Synonym(s):

Common Name(s): seagrape

Status on Wake: alien-invasive

Wake Risk Assessment: high

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

The introduced sea grape tree is considered to be highly invasive in many areas throughout the Pacific islands and definitely has the potential for spread and dominance of the native vegetation on Wake Atoll. This species was found on both Wake and Peale Islets during the 2019 survey and was also previously recorded by Fosberg and Herbst during their early surveys.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Portulaca lutea*

Plant Group: Dicots

Family: Portulacaceae

Life Form: herb

Species Code: PorLut

Synonym(s):

Common Name(s): yellow purslane

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native succulent herb was found on all of the islets on Wake Atoll during the 2019 survey and was also recorded by Fosberg and Herbst during their earlier surveys. Although this species appears to be very similar in appearance to the introduced *Portulaca oleracea*, the native species can be recognized by the presence of stiff brown hairs at the base of the leaves where they attach to the stem of the plant.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Portulaca oleracea*

Plant Group: Dicots

Family: Portulacaceae

Life Form: herb

Species Code: PorOle

Synonym(s):

Common Name(s): purslane, hogweed, pigweed

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced *Portulaca* species is very similar in appearance to the native *Portulaca lutea*. However, it can generally be distinguished by its red stems and the lack of stiff brown hairs at the base of the leaves where they attach the main stem of the plant.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: Warren L. Wagner, courtesy of Smithsonian Institution



Photograph: Warren L. Wagner, courtesy of Smithsonian Institution

Wake Atoll Plant Photo Key From 2019 Survey

*Gardenia taitensis*

Plant Group: Dicots

Family: Rubiaceae

Life Form: shrub

Species Code: GarTai

Synonym(s):

Common Name(s): tiare

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced ornamental shrub species was found planted around several residence buildings on Wake Islet. It is a low weed risk threat and is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Ixora* sp.

Plant Group: Dicots

Family: Rubiaceae

Life Form: shrub

Species Code: IxoSp

Synonym(s):

Common Name(s): ixora

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced ornamental shrub with very showy orange-red (sometimes white) flowers was found planted around several residences on the northwest part of Wake Islet. This species is unlikely to spread beyond where it is actively planted and cultivated.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☒

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Morinda citrifolia



Plant Group: Dicots

Family: Rubiaceae

Life Form: tree

Species Code: MorCit

Synonym(s):

Common Name(s): noni, Indian-mulberry

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

Although this species is naturally found on many Pacific islands, it is not considered to be native to Wake Atoll and exists there because it has been introduced. This species was found only in a few locations on Wake Islet, but seedlings and small plants were also found adjacent to the larger plants indicating it is capable of spreading beyond where it was originally planted.

Herbst 1998 distribution:

Wilkes: ☐

Wake: ☒

Peale: ☐

2019 survey distribution: Wilkes N: ☐

Wilkes S: ☐

Wake: ☒

Peale: ☐



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Oldenlandia corymbosa*

Plant Group: Dicots

Family: Rubiaceae

Life Form: herb

Species Code: OldCor

Synonym(s): *Hedyotis corymbosa*

Common Name(s): flat-top mille grains, diamond flower

Status on Wake: alien-naturalized

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

Comments:

This small introduced herb was not recorded previously by either Fosberg or Herbst but was identified on Wake by M. Waite and J. Gilardi in the early 2000s. This plant has very small, inconspicuous flowers and indistinctive foliage and can be easily missed. It was found established in a few sites on both Wake and Peale Islets during the 2019 survey.

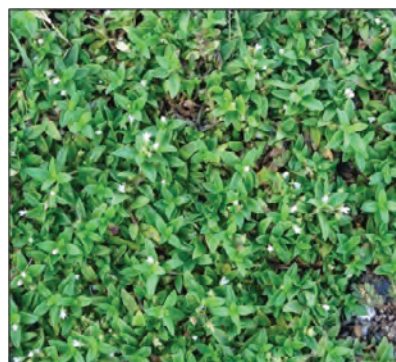
Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Manilkara zapota*

Plant Group: Dicots

Family: Sapotaceae

Life Form: tree

Species Code: ManZap

Synonym(s):

Common Name(s): sapodilla

Status on Wake: cultivated

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced tree was found planted in only one site near the residence compound on the northwest part of Wake Islet. It appears to pose a low weed risk and is unlikely to spread beyond where it is currently planted.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Solanum torvum*

Plant Group: Dicots

Family: Solanaceae

Life Form: shrub

Species Code: SolTor

Synonym(s):

Common Name(s): turkeyberry, pea eggplant

Status on Wake: alien-naturalized

Wake Risk Assessment: medium

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced shrub/small tree was found planted in several locations in the residence area on the northwest part of Wake Islet as well as growing naturally near the Solid Waste Accumulation Area on the southeastern part of Wake Islet. This species is considered to pose a medium weed risk for spreading into other areas on the atoll.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Polypremnum procumbens



Plant Group: Dicots

Family: Tetrachondraceae

Life Form: herb

Species Code: PolPro

Synonym(s):

Common Name(s): Juniper leaf

Status on Wake: alien-naturalized

Wake Risk Assessment: low

 Recorded by: ☐ Fosberg and Sachet 1969 ☐ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐ Y

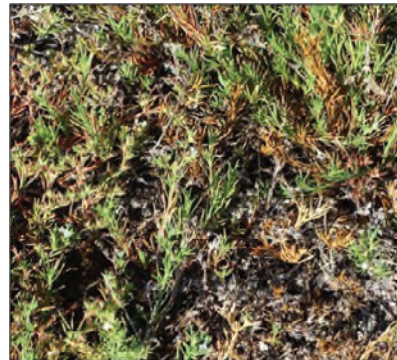
Comments:

This small and inconspicuous introduced herb was found only in a few locations on Wake Islet during the 2019 survey. Although it is definitely established in the wild, it likely poses little threat to impacting or altering the native vegetation on Wake Atoll.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☐Peale: ☐2019 survey distribution: Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Pilea microphylla*

Plant Group: Dicots

Family: Urticaceae

Life Form: herb

Species Code: PilMic

Synonym(s):

Common Name(s): artillery plant

Status on Wake: alien-invasive

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced herb was only found around residence and other buildings on the northwest part of Wake Islet where there appeared to be additional moisture. This species is not considered to be a threat for spreading beyond these unique habitats.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey



Stachytarpheta jamaicensis

Plant Group: Dicots

Family: Verbenaceae

Life Form: shrub



Species Code: StaJam

Synonym(s):

Common Name(s): Jamaica vervain, light-blue snakeweed

Status on Wake: alien-invasive

Wake Risk Assessment: medium

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This introduced shrub was found to be established on all of the islets on Wake Atoll during the 2019 survey. It was also recorded previously by Fosberg and Herbst during their earlier surveys. While several other species of *Stachytarpheta* have been listed as being found on Wake previously, all of the plants found during the 2019 survey keyed out to *S. jamaicensis*. This species does pose a weed risk and may be considered for control.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒2019 survey distribution: Wilkes N: ☐Wilkes S: ☒Wake: ☒Peale: ☒

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Tribulus cistoides*

Plant Group: Dicots

Family: Zygophyllaceae

Life Form: shrub

Species Code: TriCis

Synonym(s):

Common Name(s): nohu

Status on Wake: native

Wake Risk Assessment: native species

Recorded by: ☒ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This native shrub with bright yellow flowers and silky-green foliage was found in a few locations on Wake Islet. However, it was very abundant in the Bird Sanctuary area on Wilkes Islet where it formed a dense native shrub community intermixed with *Lepidium bidentatum* and *Portulaca lutea*.

Herbst 1998 distribution:

Wilkes: ☒Wake: ☒Peale: ☒

2019 survey distribution:

Wilkes N: ☒Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey



Photograph: J. Jacobi, U.S. Geological Survey

Wake Atoll Plant Photo Key From 2019 Survey

*Tribulus terrestris*

Plant Group: Dicots

Family: Zygophyllaceae

Life Form: shrub

Species Code: TriTer

Synonym(s):

Common Name(s): puncture vine

Status on Wake: alien-invasive

Wake Risk Assessment: low

Recorded by: ☐ Fosberg and Sachet 1969 ☒ Herbst 1998 ☒ 2019 Survey New in 2019 Survey? ☐

Comments:

This small introduced species of *Tribulus* was found in just a few locations, primarily in the lawns near the residence areas, on the northwest part of Wake Islet. It was also recorded previously by Herbst in his 1994 and 1998 surveys.

Herbst 1998 distribution:

Wilkes: ☐Wake: ☒Peale: ☐

2019 survey distribution:

Wilkes N: ☐Wilkes S: ☐Wake: ☒Peale: ☐

Photograph: James L. Reveal, courtesy of Smithsonian Institution



Photograph: James L. Reveal, courtesy of Smithsonian Institution



Photograph: Forest and Kim Starr, Starr Environmental



Photograph: Forest and Kim Starr, Starr Environmental

Wake Atoll Plant Photo Key From 2019 Survey

Appendix B3. Plant Specimens Collected on Wake Atoll in 2019

Table B3.1. List of plant specimens collected during U.S. Geological Survey sampling on Wake Atoll in 2019. Names for two *Boerhavia* species have been updated after these specimens were deposited in the B.P. Bishop Museum Herbarium: *B. diffusa*=*B. coccinea* and *B. tetrandra*=*B. albiflora*.

Islet: Wa, Wake; Wi-N, Wilkes (north islet); Wi-S, Wilkes (south islet); P, Peale. **Status:** A, alien; A-I, alien invasive; A-N, alien naturalized; Nat, native; Cul, cultivated]

Date	Collector	Islet	Collection number	Plant group	Family	Taxon name	Life form	Status
27 May 2019	J. Jacobi	Wa	JDJ-2019-22	Monocots	Cyperaceae	<i>Fimbristylis cymosa</i> R.Br.	Sedge	Nat
27 May 2019	J. Jacobi	Wa	JDJ-2019-27	Monocots	Cyperaceae	<i>Fimbristylis dichotoma</i> (L.) Vahl	Sedge	A-N
28 May 2019	J. Jacobi	Wa	JDJ-2019-39	Monocots	Cyperaceae	<i>Fimbristylis dichotoma</i> (L.) Vahl	Sedge	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-25	Monocots	Poaceae	<i>Bothriochloa pertusa</i> (L.) A.Camus	Grass	A-N
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-56	Monocots	Poaceae	<i>Bothriochloa pertusa</i> (L.) A.Camus	Grass	A-N
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-59	Monocots	Poaceae	<i>Bothriochloa pertusa</i> (L.) A.Camus	Grass	A-N
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-61	Monocots	Poaceae	<i>Bothriochloa pertusa</i> (L.) A.Camus	Grass	A-N
03 Jun 2019	J. Jacobi	Wa	JDJ-2019-68	Monocots	Poaceae	<i>Bothriochloa pertusa</i> (L.) A.Camus	Grass	A-N
28 May 2019	J. Jacobi	Wa	JDJ-2019-43	Monocots	Poaceae	<i>Cenchrus echinatus</i> L.	Grass	A-I
05 Jun 2019	J. Jacobi	Wa	JDJ-2019-75	Monocots	Poaceae	<i>Cenchrus echinatus</i> L.	Grass	A-I
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-60	Monocots	Poaceae	<i>Chloris barbata</i> Sw.	Grass	A-I
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-12	Monocots	Poaceae	<i>Dactyloctenium aegyptium</i> (L.) Willd.	Grass	A-N
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-6	Monocots	Poaceae	<i>Eleusine indica</i> (L.) Gaertn.	Grass	A-N
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-13	Monocots	Poaceae	<i>Eleusine indica</i> (L.) Gaertn.	Grass	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-28	Monocots	Poaceae	<i>Eleusine indica</i> (L.) Gaertn.	Grass	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-21	Monocots	Poaceae	<i>Eragrostis amabilis</i> (L.) Wight & Arn.	Grass	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-16	Monocots	Poaceae	<i>Eragrostis scabriflora</i> Swallen	Grass	A-N
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-33	Monocots	Poaceae	<i>Eragrostis scabriflora</i> Swallen	Grass	A-N
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-62	Monocots	Poaceae	<i>Eragrostis scabriflora</i> Swallen	Grass	A-N
03 Jun 2019	J. Jacobi	Wa	JDJ-2019-67	Monocots	Poaceae	<i>Eragrostis scabriflora</i> Swallen	Grass	A-N
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-40	Monocots	Poaceae	<i>Eustachys petraea</i> (Sw.) Desv.	Grass	A-N
30 May 2019	J. Jacobi	P	JDJ-2019-47	Monocots	Poaceae	<i>Eustachys petraea</i> (Sw.) Desv.	Grass	A-N
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-4	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-31	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat
28 May 2019	J. Jacobi	Wa	JDJ-2019-37	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat
28 May 2019	J. Jacobi	Wa	JDJ-2019-38	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat
28 May 2019	J. Jacobi	Wa	JDJ-2019-41	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat
28 May 2019	J. Jacobi	Wa	JDJ-2019-42	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat
31 May 2019	J. Jacobi	P	JDJ-2019-52	Monocots	Poaceae	<i>Lepturus repens</i> (G.Forst.) R.Br.	Grass	Nat

Table B3.1. List of plant specimens collected during U.S. Geological Survey sampling on Wake Atoll in 2019. Names for two *Boerhavia* species have been updated after these specimens were deposited in the B.P. Bishop Museum Herbarium: *B. diffusa*=*B. coccinea* and *B. tetrandra*=*B. albiflora*.—Continued

[Islet: Wa, Wake; Wi-N, Wilkes (north islet); Wi-S, Wilkes (south islet); P, Peale. Status: A, alien; A-I, alien invasive; A-N, alien naturalized; Nat, native; Cul, cultivated]

Date	Collector	Islet	Collection number	Plant group	Family	Taxon name	Life form	Status
27 May 2019	J. Jacobi	Wa	JDJ-2019-29	Monocots	Poaceae	<i>Paspalum scrobiculatum</i> L.	Grass	A-I
30 May 2019	J. Jacobi	P	JDJ-2019-49	Monocots	Poaceae	<i>Paspalum setaceum</i> Michx.	Grass	A-N
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-58	Monocots	Poaceae	<i>Paspalum setaceum</i> Michx.	Grass	A-N
03 Jun 2019	J. Jacobi	Wa	JDJ-2019-66	Monocots	Poaceae	<i>Paspalum setaceum</i> Michx.	Grass	A-N
29 May 2019	J. Jacobi	Wi-S	JDJ-2019-45	Dicots	Amaranthaceae	<i>Amaranthus blitum</i> L.	Herb	A-N
04 Jun 2019	J. Jacobi	Wa	JDJ-2019-69	Dicots	Amaranthaceae	<i>Amaranthus dubius</i> Mart.	Herb	A-N
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-34	Dicots	Asteraceae	<i>Erigeron canadensis</i> L.	Herb	A-N
30 May 2019	J. Jacobi	Wa	JDJ-2019-50	Dicots	Asteraceae	<i>Erigeron canadensis</i> L.	Herb	A-N
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-30	Dicots	Asteraceae	<i>Pluchea carolinensis</i> (Jacq.) G. Don	Shrub	A-I
06 Jun 2019	J. Jacobi	Wa	JDJ-2019-77	Dicots	Bignoniaceae	<i>Tabebuia aurea</i> (Manso) Benth. & Hook. fil. ex S. Moore	Tree	Cul
25 May 2019	J. Jacobi	Wa	JDJ-2019-2	Dicots	Brassicaceae	<i>Brassica nigra</i> (L.) W.D.J. Koch	Herb	A-N
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-9	Dicots	Brassicaceae	<i>Lepidium bidentatum</i> Montin	Herb	Nat
25 May 2019	J. Jacobi	Wa	JDJ-2019-3	Dicots	Cleomaceae	<i>Gynandropsis gynandra</i> (L.) Briq.	Herb	A-N
04 Jun 2019	J. Jacobi	Wa	JDJ-2019-71	Dicots	Euphorbiaceae	<i>Euphorbia hirta</i> L.	Herb	A-N
29 May 2019	J. Jacobi	Wi-S	JDJ-2019-44	Dicots	Euphorbiaceae	<i>Euphorbia hypericifolia</i> L.	Shrub	A-I
30 May 2019	J. Jacobi	P	JDJ-2019-48	Dicots	Euphorbiaceae	<i>Euphorbia hypericifolia</i> L.	Shrub	A-I
27 May 2019	J. Jacobi	Wa	JDJ-2019-19	Dicots	Euphorbiaceae	<i>Euphorbia thymifolia</i> L.	Herb	A-N
03 Jun 2019	J. Jacobi	Wa	JDJ-2019-65	Dicots	Euphorbiaceae	<i>Euphorbia thymifolia</i> L.	Herb	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-15	Dicots	Fabaceae	<i>Dalea emarginata</i> (Torr. and A.Gray) Shinnars	Herb	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-18	Dicots	Fabaceae	<i>Desmanthus pernambucanus</i> (L.)Thell.	Shrub	A-I
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-57	Dicots	Fabaceae	<i>Desmanthus pernambucanus</i> (L.)Thell.	Shrub	A-I
04 Jun 2019	J. Jacobi	Wa	JDJ-2019-70	Dicots	Fabaceae	<i>Desmanthus virgatus</i> (L.)Willd.	Shrub	A-I
06 Jun 2019	J. Jacobi	Wa	JDJ-2019-79	Dicots	Fabaceae	<i>Gliricidia sepium</i> (Jacq.)Walp.	Tree	Cul
27 May 2019	J. Jacobi	Wa	JDJ-2019-20	Dicots	Heliotropiaceae	<i>Euploca procumbens</i> var. <i>depressum</i> (Chamisso)	Herb	A-N
31 May 2019	J. Jacobi	P	JDJ-2019-54	Dicots	Lamiaceae	<i>Vitex trifolia</i> L.	Shrub	Cul
06 Jun 2019	J. Jacobi	Wa	JDJ-2019-78	Dicots	Lamiaceae	<i>Vitex trifolia</i> L.	Shrub	Cul
31 May 2019	J. Jacobi	P	JDJ-2019-51	Dicots	Malvaceae	<i>Abutilon indicum</i> subsp. <i>albescens</i> (Miq.) Borssum Waalkes	Shrub	A-N
02 Jun 2019	J. Jacobi	Wa	JDJ-2019-64	Dicots	Malvaceae	<i>Sida ciliaris</i> L.	Herb	A-N
05 Jun 2019	J. Jacobi	Wa	JDJ-2019-73	Dicots	Malvaceae	<i>Sida ciliaris</i> L.	Herb	A-N
05 Jun 2019	J. Jacobi	Wa	JDJ-2019-76	Dicots	Malvaceae	<i>Talipariti tiliaceum</i> (L.) Fryxell	Tree	Cul

Table B3.1. List of plant specimens collected during U.S. Geological Survey sampling on Wake Atoll in 2019. Names for two *Boerhavia* species have been updated after these specimens were deposited in the B.P. Bishop Museum Herbarium: *B. diffusa*=*B. coccinea* and *B. tetrandra*=*B. albiflora*.—Continued

[Islet: Wa, Wake; Wi-N, Wilkes (north islet); Wi-S, Wilkes (south islet); P, Peale. Status: A, alien; A-I, alien invasive; A-N, alien naturalized; Nat, native; Cul, cultivated]

Date	Collector	Islet	Collection number	Plant group	Family	Taxon name	Life form	Status
27 May 2019	J. Jacobi	Wa	JDJ-2019-26	Dicots	Nyctaginaceae	<i>Boerhavia diffusa</i> L.	Herb	Nat
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-5	Dicots	Nyctaginaceae	<i>Boerhavia repens</i> L.	Herb	Nat
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-7	Dicots	Nyctaginaceae	<i>Boerhavia repens</i> L.	Herb	Nat
31 May 2019	J. Jacobi	P	JDJ-2019-53	Dicots	Nyctaginaceae	<i>Boerhavia tetrandra</i> Forst. fil.	Herb	Nat
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-35	Dicots	Passifloraceae	<i>Passiflora foetida</i> var. <i>hispida</i> (DC. ex Triana & Planchon) Killip ex Gleason	Vine	A-I
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-10	Dicots	Portulacaceae	<i>Portulaca lutea</i> Sol. ex Seem.	Herb	Nat
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-8	Dicots	Portulacaceae	<i>Portulaca oleracea</i> L.	Herb	A-N
28 May 2019	J. Jacobi	Wi-S	JDJ-2019-36	Dicots	Portulacaceae	<i>Portulaca oleracea</i> L.	Herb	A-N
01 Jun 2019	J. Jacobi	Wa	JDJ-2019-55	Dicots	Rubiaceae	<i>Oldenlandia corymbosa</i> L.	Herb	A-N
04 Jun 2019	J. Jacobi	Wa	JDJ-2019-72	Dicots	Solanaceae	<i>Solanum torvum</i> Swartz	Shrub	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-14	Dicots	Tetrachondraceae	<i>Polypremum procumbens</i> L.	Herb	A-N
27 May 2019	J. Jacobi	Wa	JDJ-2019-17	Dicots	Verbenaceae	<i>Stachytarpheta jamaicensis</i> (L.) Vahl	Shrub	A-I
26 May 2019	J. Jacobi	Wi-N	JDJ-2019-11	Dicots	Zygophyllaceae	<i>Tribulus cistoides</i> L.	Shrub	Nat
25 May 2019	J. Jacobi	Wa	JDJ-2019-1	Dicots	Zygophyllaceae	<i>Tribulus terrestris</i> L.	Shrub	A-I