

Title	Coastal Vegetation of North East NSW. VIS ID 3885
Alternative title(s)	CoastVeg_NE_NSW_E_3885
Abstract	Fine scale vegetation mapping for areas of coastal north east NSW undertaken by Steve Griffiths and Bob Wilson from 1984 to 2012. The mapping includes all large and many smaller conservation reserves from the Forster district northwards, in addition to areas of significant native vegetation on crown or freehold land. Aerial photo interpretation (API) of predominantly 1:25000 colour photography, and limited coverage at scales of 1:10000 and 1:16000. The structural classification follows Walker & Hopkins (1984). Subformation names are an adaptation of the classification proposed by Beadle & Costin (1952). The communities were named after dominant indicator species of the tallest stratum (and occasionally lower stratum), and most could be considered associations using the definition of Beadle (1981). The separately mapped areas were merged into a single dataset in 1994. Yuraygir was updated in 2001-02. In 2011 three additional areas were included: Booti Booti National Park (1999), Frogalla Swamp (1996) and Saltwater Catchment (2005, Kendall and Kendall). NB. Frogalla and Saltwater were mapped for non OEH projects. The combined dataset includes the following areas: • Booti Booti NP • Broadwater NP • Bundjalung NP • Crowdy Bay NP • Diggers Camp VCL • Emerald Beach VCL • Frogalla Swamp (GTCC contract, 1996) • Goanna Headland VCL • Hat Head NP • Hathead NP • Iluka NR • Kattang NR • Lake Innes NR • Limeburners Creek NR • Minnie Waters VCL • Moonee Beach NR • Newrybar Swamp VCL • Richmond River VCL • Saltwater Catchment (DLWC contract, P.Kendall, 2003) • Yuraygir NP Please note that many of the reserve boundaries have expanded since the original vegetation mapping. RN17 Forest Type codes were only added to the vegetation mapping in 1994 ie. the later additions do not have FT codes in the attribute table. Other coastal reserves mapped by Griffiths and/or Wilson that have not been included in this merged dataset are: Khappinghat NR 2000 Wallis Island NR 2017 VIS ID 3885
Resource locator	
Data Quality Statement	Name: Data Quality Statement Protocol: WWW:DOWNLOAD-1.0-http--download Description: Data quality statement for Coastal Vegetation of North East NSW. VIS ID 3885 Function: download
Vegetation CoastVeg NE NSW E VIS 3885	Name: Vegetation CoastVeg NE NSW E VIS 3885 Protocol: WWW:DOWNLOAD-1.0-http--download Function: download

Unique resource identifier	
Code	8c9c5e80-ca21-4caa-9e57-01763c1051d8
Presentation form	Map digital
Edition	unknown
Dataset language	English
Metadata standard	
Name	ISO 19115
Edition	2016
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/8c9c5e80-ca21-4caa-9e57-01763c1051d8
Purpose	Vegetation Mapping
Status	Completed
Spatial representation	
Type	vector
Spatial reference system	
Code identifying the spatial reference system	4283
Equivalent scale	1:None
Additional information source	Replaces coastal_NSW_VISmap_201 & booti_VISmap_143; ; COASTAL VEGETATION MAPPING PROJECT - TABLE OF COMMUNITIĒS & CODES. WORKING COPY NOVEMBER 1996 - S.J. GRIFFITH & R.J. WILSON
Topic category	

Keyword set	
keyword value	VEGETATION FLORA
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
West bounding longitude	152.641725
East bounding longitude	153.603596
North bounding latitude	-31.877267
South bounding latitude	-28.748054
NSW Place Name	North East NSW Coast
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	1994-06-01
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	Unknown
Contact info	
Contact position	Data Broker
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Responsible party role	pointOfContact
Lineage	
The project to map coastal vegetation in northern New South Wales was initiated in 1984 by Ashley Love, Senior Naturalist at the former Northern Region (Grafton) office of the National Parks and Wildlife Service (Griffith 1984). Shortly before this, S. Griffith completed a	

vegetation survey and ecological studies in Bundjalung National Park (a B.Sc. (Hons.) project with the University of New England, Armidale under the supervision of the late John B. Williams (Griffith 1983). Systematic vegetation surveys were initiated at a time when little was known about the floristic composition and spatial distribution of coastal plant communities in northern NSW, especially those representing structural formations other than forest (e.g. mallee, shrubland, heathland, sedgeland).; ; S. Griffith has collaborated with API (air photo interpretation) specialist R. Wilson since inception of the project, and this partnership has produced a series of maps at scales of 1: 25000 or larger for extensive areas of vegetation along approximately 500 km of coastline in northern NSW. Apart from a hardcopy map sheet for Booti Booti National Park and several island reserves in Wallis Lake (Griffith et al. 2000), the mapping is unpublished. Nonetheless, most of the mapping has been integrated into a GIS (geographical information system) managed by the North East (Coffs Harbour) branch of the NSW Department of Environment and Climate Change. S. Griffith and R. Wilson continue their collaboration on projects to map and document coastal vegetation in northern NSW (e.g. Griffith and Wilson 2009).; ; Project methods;; ; Air photo interpretation;; ; The mapping of coastal vegetation patterns in north-eastern NSW has been achieved with air photo interpretation (API) of stereo-paired photography, generally in colour at a scale of 1: 25 000. Much of the initial API was undertaken in the 1980s using comparatively crude sketch mapping techniques to transfer polygons onto 1: 25 000 CMA map bases. This work was supplemented by additional mapping in the early 1990s for the NRAC project. Digital on-screen stereo capture techniques have been used in the most recent projects. ; ; Delineation of map units;; ; API groups are the basic map unit derived from stereoscopic interpretation of vegetation patterns, and these are primarily distinguished on the basis of habitat, and structure and floristic composition of the dominant (generally tallest) stratum. Each API group is assigned to a vegetation formation (e.g. forest, heathland) and subformation (e.g. swamp sclerophyll forest, dry heathland). The structural classification follows Walker and Hopkins (1984), and subformation categories are adopted or modified from the classification by Beadle and Costin (1952).; ; API groups are distinguished on vegetation maps using 5-digit numeric codes. The first four digits of each code identify the formation, subformation and floristic assemblage. For example, codes in the series 0000-4999 are assigned to forest and woodland, those in the series 4000-4499 are assigned to swamp sclerophyll forest and woodland, and swamp sclerophyll forest or woodland with a tallest stratum (canopy) dominated by *Melaleuca quinquenervia* has the unique code 4003. A fifth digit identifies the crown cover in map polygons: 1 = mid-dense to dense (e.g. 40031 for *M. quinquenervia* open and closed forest); and 2 = very sparse to sparse (e.g. 40032 for *M. quinquenervia* open woodland and woodland).; ; API groups are generally analogous to plant associations sensu Beadle (1981): 'a community in which the dominant stratum exhibits uniform floristic composition, the community usually exhibiting uniform structure'. In rainforests, however, floristic composition of the tallest stratum is often somewhat variable within and between stands. Where this is found to be the case, an API group is assigned to the most appropriate suballiance of Floyd (1990). Sun et al. (1997) compare this system of vegetation classification and mapping (as 'NSW NPWS Coastal Vegetation Mapping') with systems in use for other parts of NSW and Australia.; ; Legends for maps;; ; A legend facilitates the interpretation of each project map by describing the structure and floristic composition of every API group. The API groups are named after dominant indicator species, usually for the tallest stratum although occasionally dominant species of a second (mid) stratum are also considered. The general range in height and crown cover for each API group is expressed using the structural classes of Walker and Hopkins (1984), for example *Banksia integrifolia* subsp. *integrifolia* mid-high open woodland and woodland. As observed during fieldwork to validate the API and vegetation mapping, subsidiary (10-30% of total crown cover) or minor (10% of total cover) associates in the tallest stratum are given for each API group, along with any emergent species above the tallest stratum (generally 5% of total crown cover). Also provided for each API group is a list of the more abundant species in lower strata or otherwise common as specialist growth forms (e.g. vines). Where applicable, the legend also lists the analogous Forest Type (Forestry Commission of NSW 1989) for each API group (e.g. API group 40021: *Eucalyptus robusta* open forest forms part of the broader Forest Type 30: Swamp Mahogany).; ; Project output and applications;; ; The vegetation mapping completed to date includes all large and many smaller conservation reserves from the Forster district northwards, in addition to areas of significant native vegetation on Crown or freehold land.; ; Future directions for project refinement and application;; ; Due to mapping procedures used in the past, spatial inaccuracies are evident in the current coastal vegetation mapping data set when overlaid on more recent ortho-/satellite imagery. Attribution of polygons is considered to be relatively good, however advances in technology such as on-screen stereo capture software and digital stereo-/ortho-imagery has significantly improved interpretation and mapping accuracy.; ; With the availability in 2009 of NSW Department of Lands ADS40 digital imagery (stereo- and ortho-) and with some of the original mapping and fieldwork having been completed 25 years earlier, a revision of the coastal vegetation mapping project series is timely and would provide;; ; * refinement of polygon attribution and boundaries;; ; * spatial accuracy commensurate with ADS40 ortho-imagery;; ; * a temporal context for many projects, particularly for coastal headlands where vegetation change has been mapped over a time series beginning in the 1940s (Dodkin et al. 2007); ; * not only API group and cover code attribution for each polygon, but extended to include an API confidence score, an understorey code, and attribution to landform and landscape categories (e.g. soil landscape process group, landform element); ; * a single unified, spatially and floristically consistent GIS layer to portray plant biogeography and habitat preference across a wide range of coastal and near-coastal landscapes in northern NSW;; ; * a mapping and classification

system that accommodates future mapping projects in hitherto unmapped parts of coastal NSW .; ; References; ; Beadle, N.C.W. (1981) The vegetation of Australia. (Gustav Fischer: Stuttgart); ; Beadle, N.C.W. and Costin, A.B. (1952) Ecological classification and nomenclature. Proceedings of the Linnean Society of New South Wales 77: 61-82.; ; Dodkin, M., Laut, B., Marchant, B., Eddie, M., Wilson, R., Griffith, S. and Floyd, A. (2007) Biodiversity, fire and weed management on mid north coast headlands in New South Wales. Conference Poster. Bitou Bush and Boneseed National Forum, 28-29 August 2007, Geelong, Victoria.; ; Floyd, A.G. (1990) Australian Rainforests in New South Wales. Volumes 1-2 (Surrey Beatty and Sons - NSW National Parks and Wildlife Service: Sydney).; ; Forestry Commission of NSW (1989) Forest Types in New South Wales. Research Note 17.; ; Gow, L. (2009) Application of MODIS imagery to GDE identification and monitoring. Presentation at Workshop: Groundwater Dependent Ecosystems in Coastal Dune Systems, 3-4 September 2009, South West Rocks, NSW. ; ; Griffith, S.J. (1983) 'A survey of the vegetation of Bundjalung National Park.' B.Sc. (Hons.) thesis. Department of Botany, University of New England, Armidale.; ; Griffith, S.J. (1984) A survey of the vegetation of Yuraygir National Park - methodology. In Fire management resource data collection in Yuraygir National Park: workshop proceedings. (Eds A. Love and G. Vincent) pp. 53-74. (NSW National Parks and Wildlife Service: Grafton).; ; Griffith, S.J. (1993) 'Conservation status of coastal plant communities in northern NSW - a review.' Report to NSW National Parks and Wildlife Service, Grafton. Funded under the Save the Bush Program.; ; Griffith, S.J. (2005) New South Wales North Coast wetland vegetation communities. A preliminary literature review. (Department of Environment and Conservation: Coffs Harbour).; ; Griffith, S.J., Bale, C. and Adam, P. (2004) The influence of fire and rainfall on seedling recruitment in sand mass (wallum) heathland of north-eastern New South Wales. Australian Journal of Botany 52 (1): 1-27.; ; Griffith, S.J., Bale, C. and Adam, P. (2008) Environmental correlates of coastal heathland and allied vegetation. Australian Journal of Botany. 56: 512-526.; ; Griffith, S.J., Bale, C., Adam, P. and Wilson, R. (2003) Wallum and related vegetation on the NSW North Coast: description and phytosociological analysis. Cunninghamia 8(2): 202-252.; ; Griffith, S.J. and Wilson, R. (2007) Wallum on the Napiac Pleistocene barriers, lower North Coast of New South Wales. Cunninghamia 10: 93-111.; ; Griffith, S.J. and Wilson, R. (2008) Wetland biodiversity in coastal New South Wales: the Wallis Lake catchment as a case study. Cunninghamia 10: 569-598.; ; Griffith, S.J. and Wilson, R. (2009) 'Wallis Lake estuarine islands vegetation description and mapping project.' Undertaken for Great Lakes Council, Forster. Sponsored by NSW Estuary Funds.; ; Griffith, S.J., Wilson, R. and Maryott-Brown, K. (2000) Vegetation and flora of Booti Booti National Park and Yahoo Nature Reserve, lower North Coast of New South Wales. Cunninghamia 6(3): 645-715.; ; NSW National Parks and Wildlife Service (1997a) Fire management plan for Kattang Nature Reserve.; ; NSW National Parks and Wildlife Service (1997b) Fire management plan for Crowdy Bay National Park.; ; NSW National Parks and Wildlife Service (1998a) Fire management plan for Limeburners Creek Nature Reserve.; ; NSW National Parks and Wildlife Service (1998b) Fire management plan for Broadwater National Park.; ; Sun, D., Hnatiuk, R.J. and Neldner, V.J. (1997) Review of vegetation classification and mapping systems undertaken by major forested land management agencies in Australia. Australian Journal of Botany 45: 929-948.; ; Walker, J. and Hopkins, M.S. (1984) Vegetation. In Australian soil and land survey field handbook. (Eds R.C. McDonald, R.F. Isbell, J.G. Speight, J. Walker and M.S. Hopkins) pp. 44-67. (Inkata Press: Melbourne); ; Watkins, G., Moore, J., Warwick, N., Griffith, S. and Deegan, C. (2006) Is groundwater for urban use worth the effort? Conference Paper. Enviro 06 Conference and Exhibition, 9-11 May 2006, Melbourne, Victoria.; ; Beadle,N.C.W. (1981). The Vegetation of Australia. Cambridge University Press, Cambridge.; Beadle,N.C.W. & Costin,A.B.(1952). Ecological classification and nomenclature. Proceedings of the Linnean Society. 77:61-82.; Walker,J. & Hopkins,M.S.(1984). Vegetation. In R.C.McDonald, R.F.Isbell, J.G.Speight, J.Walker & M.S.Hopkins(eds). Australian Soil and Land Survey Field Handbook. pp44-67. Inkata Press, Melbourne.; ; Other references include;; ; Griffith, S.J. and Wilson, R. (1996) 'Vegetation of Frogalla wetland, Hallidays Point.' Vegetation map and legend, prepared for Greater Taree City Council and Hallidays Point Tidy Towns.

Limitations on public access

Scope

dataset

DQ Completeness Commission

Effective date

2001-01-01

DQ Completeness Omission

Effective date

2001-01-01

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