GIS METADATA: DETAILED REPORT

SSD File: All Fires 20 21 gw.shp

IDENTIFICATION INFORMATION

Title: Fires - All 2020\21 Date of layer completion: 05/08/2021

Brief Description: Fires - All 2020\21

Abstract Description:

All recorded fires on CapeNature managed property.

Description of Purpose:

The dataset is captured as part of CapeNature's fire management policy to provide an accurate record of the fire history of those areas managed by CapeNature, in order to facilitate ongoing analysis of veld age, fire frequency and fire return intervals as indicators of the state of the veld managed by CapeNature.

Methodology / Lineage Description:

HISTORY: Digitising of historical fire records was initiated by Chris Burgers in 1998, with the assistance of Riki de Villiers. It was substantially added to during 2006-7 by the CAPE GEF Fire project by Granville van Ross and Belinda Munsami. All this work was vetted by and large numbers of further records added by Arne Purves, Helen de Klerk, Cher-Lynn Petersen and Therese Forsyth during 2006-9. Significant contributions were also made by Anne-Lise Schutte-Vlok, Paul Buchholz, Tony Marshall and Patrick Meyer. Our thanks to Armin Seydack who made many fire records available for various reserves in the Southern Cape, and Greg Forsyth making records available for fires on state forests land, that were not available in CapeNature's records.

Since 2000, most Reserve Managers digitize fires themselves using on-screen digitizing over aerial photos and satellite images and GPS (either by walking or flying the fire line) and enter the attributes of the fire report directly into CapeNature's fire database. All records are centralized and collated by the GIS Fire Technician at Scientific Services.

During a follow-up project, extensive data cleaning was done by Therese Forsyth since July 2012 till now and is still ongoing to topologically clean the fire scar shapefiles. This entailed overlaying fire scars per fire season and cleaning out duplicates, slivers and overlaps that lead to too short fire intervals. For fires since 2005, the fires were also verified against the annual SPOT5 satellite mosaic images that were made available on an annual basis. Where possible fire scars were redigitized based on these satellite images.

For the past 4 to 5 years, many large fires were digitized from downloaded georeferenced thumbnail satellite images of Landsat 8 or Sentinel-2. The thumbnails are available from the USGS website.

The All_Fires_20_21_gw.shp dataset has been created by merging all the individual fire shapefiles into one fire shapefile using ArcGIS | Geoprocessing | Merge. This merged shapefile already contained a column called FIRE_CODE as all the individual shapefiles were standardize to have this column.

The columns Month and Year were added and the information for these columns were extracted from the fire code. The column Land_Unit was added.

Further attribute information was extracted from the central fire database and joined to the merged fire shapefile. This was done by loading the MS Excel spreadsheet directly into ArcGIS and then joining it to the shapefile. The layer was then spatially sorted ascending by year using Data Management tool | Sort.

The area in hectare was calculated in ArcGIS.

Product Classification: Standard Temporal Extent of the Dataset:

Descriptive Keywords: Fires - All 2020\21 **Supplemental Information / Report Reference:**

n/a

Category Name: Natural Environment

Project Name: Scale:

Bounding Polygon: North = -32.03674 **East** = 23.52027587

South = -34.78286 **West =** 18.3109953

Theme Type: Feature Content Type: Polygon

Language: English

Minimum Zoom: Maximum Zoom:

DISTRIBUTION INFORMATION

Path: q:\2_geographic\Natural_Environment\Abiotic\Fires\All_fires\

File Name: All_Fires_20_21_gw.shp

File Type Name: ArcView Shapefile Distribution - Internal: Yes

External: Yes

List of Formats:

File Size: 17.9MB Online Resource URL:

Distribution Contact Information and Ordering Instructions

Name of Contact Person: Chanel Rampartab
Name of Contact Organisation: CapeNature

Position of Responsible Person: Capability Manager, Conservation Innovation

Contact Address: Private Bag X29, Gatesville 7766
Contact E-mail: crampartab @capenature.co.za

Contact Telephone: 087 158 0096

Ordering Instruction:

WCNCB standard: Request the layer via e-mail. External users will be asked to sign a data agreement.

Fees and Terms:

WCNCB standard: No fees for shapefiles provided by e-mail.

Turnaround Time:

WCNCB standard: Need a minimum of two weeks for delivery.

DATA OWNER AND METADATA INFORMATION

Data Owner

Name of Contact Person: Therese Forsyth
Name of Contact Organisation: CapeNature
Position of Responsible Person: GIS Specialist
Contact Address: Private Bag X29, Gatesville 7766

Contact E-mail: tforsyth@capenature.co.za
Contact Telephone: 087 158 0102

Data Origin from Old records:

Metadata Creator

Metadata Creator Name: Therese Forsyth

Contact Telephone: 087 158 0102 Contact E-mail: tforsyth@capenature.co.za

Metadata Date Stamp: 13/08/2021

CONSTRAINTS AND LIMITATIONS

Use Constraints:

WCNCB standard: All data are supplied without distribution rights. You may not redistribute, copy or sell in any form (value added or not) these data to any other parties/bodies outside your organisation/department. All data sets are supplied with metadata files which, inter alias, include information on the custodian of the specific data set. Any reports and/or publications resulting from your project must acknowledge the Western Cape Nature Conservation Board (WCNCB), Scientific Services and, if different, the custodian of the data.

Access Constraints:

Copyright: No

Disclaimer:

WCNCB standard: All data are supplied with no expressed or implied warranty as to their suitability for purpose, planimetric accuracy or completeness. The WCNCB cannot be held responsible for any errors, which may occur in provided data sets.

PROJECTION PARAMETERS

Reference System Name: Reference System Code:

Projection Name:Geographic - WGS84Projection Type:Central Meridian:0Upper Parallel:0Latitude of Projection Origin:Lower Parallel:0

Projection Units: False Easting: UTM Zone: False Northing:

Datum Name: WGS84 Scale Factor at Equator:

MAINTENANCE INFORMATION

Maintenance and Update Frequency:

Revision and Update History

CONTENT INFORMATION

Has SAGDAD been used?

Has another Feature Catalogue been used? No

Catalogue Title: Catalogue Date:

Attribute Codes and Descriptions

Field Description Alias

ld ld

Fire_code Fire Code (Reserve code/month/year/nr of fire in the month)

Res_code Four digit reserve code

Land_Unit CapeNature landscape and -unit names (2019)

Month Month (zero value means the month is unknown)

Year Year

Res_CentreReserve centre nameRes_NameReserve NameLocal_DescLocality DescriptionDateStartStart Date of the fire

DateExting Date the fire was Extinguished

DateWithdr Date the team Withdrawn

Report_Off Reporting Officer

Polic_Case Police Case Number
Ignitionca Ignition Cause

Area_ha Area in hectares calculated in ArcGIS

Thumbnail: