## CODES AND COLOURS FOR EACH LANGUAGE

ALAWA (A) KRIOL (K) WUBUY (NUNGGUBUYU) (NU) MARRA (M) WARNDARRANG (W) NGANDI (NG) RITHARRNU/WÄGILAK (RW) NGALAKGAN (NN) REMBARRNGA (R) ENGLISH







**BUILD UP** 

# Yugul Mangi Fire and Seasons Calendar

# WET SEASON (December - March)



REINTAIM (KRIOL) A-NYALK (NGANDI) AGALHAL-ANBANA (WUBUY) DHULUDUR (RITHARRNU/WÄGILAK) MIJAL (MARRA)

'During rainy time, we eat preserved food, we still go hunting. We have meat, fish all the time- dry and wet time. We hunt for plums, other fruits, fish, kangaroo.' – Mrs C W Daniels

'The gum bark changes from white during a-nyalk to dark grey during Martdun' – Mrs C W Daniels

## FLADWADA (K), WARAJARRA (M), (FLOOD WATER)

SE Arnhem Land Indigenous Protected

LILISTEM (K), JAWJAW (M), NAWKNAWK (RW), WUMBADUNG (NU), JAWHJAWH (NN), YARLBUN (A), NYAWKNYAWK (R), GU-JAWHJAW MA DHADAM NGAK NGOWK (NG), (LILY STEM)

D

YARLBUN (M), DATTAM (R) AYAG (NU), (LILY SEED)

JUPI (K), GUMIRR (M), DJUPI' (RW), GU-JUPIH (NG), WUNGARRAGAGA (NU), JUPBIH (NN), YARRAGAGA (A), JUPPIH (R), (BLACK CURRANT)

> BLANGGANGGA (K), BULANGGANGGA (NU), BULANGGANGGA (A), BURLANGGANGGA (M), GU-BURLURRUGAH (NG), GORROWON (R), (WHITE CURRANT)

GU-DHULTDHUL/MA-DHANGGIH (NG), DANGGIH (R), (BILLYGOAT PLUM)

GRINPLAM (K), MA-BARRAKARLH/MA-BERRGEH (NG), BIRRGI (RW), BOERRKKOEH (R), YURRMURU (M), MUYNJUJ (NU), (GREEN PLUM)

DERRENEH (R), (RED APPLE)

BLEKPLUM (K), GULINJA/WARNNGU (M), WUNDAN (RW), WUJAL (RW), MA-WURNDANH (NG), WUUNG (NU), BALTJJA/WOM (NN), GUNINGIJI (A), WUJAL (R), (BLACK PLUM)

GUDARRGU (K, A), GUDARRGU (NU), GUDARRGU/ BURDURRGU (M), GUDURRKU' (RW), BARNAMI (R),

## (BROLGA)

In November, Yugul Mangi Rangers receive their final **fire scar map** for the year. They review their burning and plan for next year, targeting areas which weren't burnt. After an area has been burnt in the early Dry Season, the rangers leave it for a couple of years. During the Wet Season, we collect bush tucker fruits including **black**, red and **white currant/berry**, green, billygoat, black and yellow plum, red apple and wild banana. We collect water lily stems and **lily roots** until July. We also collect the small white nut like a peanut without a shell and red dye. We catch long-necked turtles with bait during February, then in May and June we dig them out of the flood plain. **Brolgas** breed from February to May. During February, Yugul Mangi Rangers attend the Arnhem Land Fire

'Barra. That's the hot wind that comes in from the north around August, September. That wind tells us the season is changing, you can feel the heat too, the humidity changes, and when it is hot that certain month. bang! Everything stops.'



EMB Ч С Р **UILD** LLÍ

m

 $\sim$ 

ent (ALFA) meeting and plan for savanna burning. This includes preparing a fire management plan, consultation plan and payment information

## WUUJI (NU), GARDANY (R), YUBI (M), (FOG)

BARRAMUNDI (K), MIRRIJI (M), MIRRITJI (RW), NI-MIRITJJI (NG), MIRRITJJI (NN), YIMAYIRRI (A), MIRRITJJI (R), YINGGULBANDI (NU), (BARRAMUNDI)

NI-NGURRU (NG), NGURRU (R, M), NANGURRU (NU), (CATFISH)

## A-GARNNGAL (NG), (BLACK NAILFISH), A-BARTJJARR (NG), GANNAL (RW), BARLANBARLAN (R), WABILIMARR (M),

(YELLOW NAILFISH)

Sometime in March, the rain usually stops. During the Run-off, all **fish** are fat and it is the best season to catch barramundi. Other fish include archer fish, **black bream, catfish,** freshwater cod, long tom, black and yellow nailfish. During March, the Yugul Mangi Rangers continue their fire management planning and undertake consultations with traditional owners, pastoralists and ALFA.

– Clarry Rogers

'The time to stop burning is when it gets very hot.' – Walter Rogers 'A hot burn, that is a 'nugudwan faiya' burn, that makes us unhappy. That is not right. Not only will the trees get burnt, it will stop the birds [wanting] to make their nest in there and even kill small lizards, the skink that climbs up the tree, kills the landscape.' – Clarry Rogers

## NUGUDWAN FAIYA (K), (WILDFIRES) BAARRA (NU), (NORTHWEST WIND)

During September, women go **dabulun** hunting. During August/September, rangers work on weed management and undertake boat patrols on the waterways. Willy willies and hot wind tell us that the hot weather time is coming. **Coolibah** is flowering.

## AUGUST

'When the birds are singing and active it means warmer season is coming.' - Mrs C W Daniels 'When the green shoots come up, that's when we

should stop burning.' – Anthony Daniels

BEWABED (K), JURIRR (M), DJURIRR' (RW), A-JURERRH (NG), DHILIBAY (NU), JURERRH (NN), JULMANJA/YUREWERR (A), JURERRH / JUWEH (R), (GREAT BOWERBIRD) TERIKI (K), WALPPURRUNGGU (R), ALBURRUNGGU (NU) JAMBIRRINA (M), (BUSH TURKEY) PINDEMIS (K), GUNGA (RW), DAYARR (R), BURRURLU/MUGARRA (M), MAGUJ (NU), (COMMON SCREW PALM/PANDANUS)

SHUGUBEG (K), GUKU (RW), RDARDA (R), NGULAWARR (M), LAGU (NU), (NATIVE HONEY, SUGAR BAG)

## WARLAN (K), WALAN (RW, NU), WARLAN (M), (COOLIBAH/RIVER GUM)

During August, plants start to put out new growth, including leaves and berries. The **bowerbird** comes out when it is getting hot. When the plants have dropped their flowers to the ground, the sugarbag (native bee) honey is ready. Up to August, Yugul Mangi Rangers take quad bikes and vehicles to check burnt areas, and to see which areas haven't been burnt. If necessary, they undertake patch burns which are small burns to add on to what has been burnt before. The Rangers stop lighting large fires and start fighting hot fires (Kriol= nugudwan faiya). This time of year is 'wrong time fire'- it cooks everything, even small animals.



# KOLWETHA (KRIOL) MARTDUN (NGANDI) AGALHAL-MARIGA (WUBUY) DRY SEASON (April-August)



## DHARRATHARRA (RITHARRNU/WAGILAK) MARDUN (MARRA) MARLUWURRU (REMBARRNGA)

## JULY

'Burning makes it easier to hunt animals including goanna, wallabies, kangaroos, bush turkey.' – Yugul Mangi rangers

'Sometimes for burning, there is a bird. Very smart bird. He is called like chicken hawk or dirdijarr. He can pick up a stick and fly with that stick from a paddock into another paddock... light a new fire.' – Hazel Farrell

## PIWI (K), DELILI (RW), MARLIPLIP (R), DILRDILGURRURRU (M) (MAGPIE LARK) WIGURN (K), WATPAK (RW, R), WARRANJAL (M), WADBAR (NU) (FERN LEAF GREVILLEA)

The Yugul Mangi Rangers are busy doing their aerial and ground burning- this goes from May to July. When the **pandanus nuts** drop to ground, we know the salt water turtles are laying their eggs. We go turtle hunting when the floodplain is dry. After we burn, bush turkey, wallabies, kangaroo and wild cattle come in for fresh pick, as well as emu, goannas, pokipain (K) (echidna) (we collect them when they see them, they hide under rocks from fire) and ants (there are lots after fire, they go into ground during burning and hibernate for the wet season). Many plant seeds need fire to germinate - for example, grevillea and woollybutt. There is also a fire bird (brown falcon) that catches prey as it escapes the fire. These birds come in when there is a fire, they pick up burning sticks and spread the fire around. The **bush stone-curlew** calls at the night during Kolwetha.

## JUNE

*'We are doing cool burning now, right time burning.' – Julie Roy* 'The right time to burn is when it is cool and the fire burns slowly... when we have heavy dew in the morning and the afternoon... The wind picks up usually midday and then we burn and that helps us push the fire along... The more time you burn when it is cooler, the more carbon credits you get." – Clarry Rogers

## BARNIM GRAS (K) (GRASS BURNING)

BIRNBIRNDU (M), BERRERHBERRERH (R) (RAINBOW BEE-EATER) DUMBUYUMBU (A, M, W) (SANDALWOOD)

## DARGIBUJ (K), BARNAPPARNA (R) (TURKEY BUSH)

# MAY

'The whistling tree- Casuarina- tells us cold weather is coming.' – Norman Wilfred and Roy Natilma

'Once the plants stop flowering and the wind is blowing from the Gulf, south east breeze, then we know it is time to burn.' - Clarry Rogers

'Mainly traditional burning was straight after the rain. When the rain stops the best time that we learnt to light fire is to go out with the old people hunting and they told us, burn here and burn there, it is only small patch burn. – Winston Thompson

KOLWETHA WIN (K), MARIGA (NU) (COLD WEATHER WIND) DREGINFLAI (K), MAGURRMAGURR (M) MELIMILI (RW), MERLEMERLEH (R), NGANGGA (NU),

# APRIL

'The grass tells us things, that spear grass. When the seeds of the spear grass are falling down, that is when it is going towards Martdun, cold weather is coming... Dragonfly starts flying at cold time... Coming into Martdun, we hunt for echidna (in the hole), blue tongue lizards and wallabies.' – Mrs C W Daniels

'Should not burn when there is still bush tucker available... if you burn the grass early, you kill your own food, your own natural food.' – Anthony Daniels

'Need to be careful about bush food. Too much burn off makes less *bushfood.'* – Irene Andrews

## NOKAMDAN REIN (K), (KNOCKEM DOWN RAIN)

GUYIYA (K, M, NN, A), GUWIYA (A), JOTMO (R), (DOG BALL BERRIES/DYSENTRY BUSH)

At this time of year, the kapok, grevillea, kurrajong, turkey bush, stringybark and many other plants are flowering. Date plum and sandalwood, which has a purple cherry and is used as a bush medicine, are fruiting. The jirdjirdug (striated pardalote), **mudlark, rainbow bee eater** and **willy wagtai**l come out. The feral gecko goes quiet. The Yugul Mangi rangers are still burning, and during June, July and August they undertake fire plot monitoring - several times after the burn to check for new leaves, flowers, tree growth, grass and fuel loads. The rangers collect seeds for the nursery. They monitor their burns using NAFI fire scars. Rangers monitor weeds after the wet season, including parkinsonia, mission grass, rubber bush and Mimosa pigra.

## (DRAGONFLY)

WULIBAT (K), GADAYKA (RW), GUNGURRUH (R), WUNGGURRUN/YARLIRRIYARLIRRI (M), (WOOLLYBUTT)

RIBA WISILING TRI (K), BURUGURR (RW), GARARR (M), ARRAGIYN (NU), (WHISTLING TREE) GANGGABARRI (K), JINGGURLILI (M), JINGGULILI (NU), DJÄNYI' (RW), (CONKERBERRY)

May is the windy, dry time. The cold weather is coming. There is heavy dew overnight and in the morning. The wind pushes out the ashes and after one week greens come out. When the grass is turning brown, young dikdik come out (Leichhardt's grasshopper). We make a fire break around this area. The dragonfly comes out- it is the first sign cold is coming. Conkerberry fruit are good to eat.

## JALMA (K, M, RW, A, R), MA-JALMA (NG), YAWOK (NN), (CHEEKY YAM) JIWURRU (M), GANDIWULK (RW), GU-DHIWIRH (NG), YANYJUG (NU), JIWURRU (NN), YANBURRABURRA (A), (NATIVE CASSAVA)

At the end of the Wet Season, knockem down rain comes and the grasses point to the west. The spear grass, wiyurlwiyurl and other grasses drop their seeds. Fresh water turtles wait for water to drop down, then they lay their eggs, go back to water and hibernate. Yugul Mangi Rangers start cool burning (right way burning). The rangers burn around the outstations while Bush Fires NT help with firebreaks for the pastoral stations. Fuel transport is undertaken to main camp for the helicopter. All year round we collect jalma (cheeky yam) and native cassava in the rainforest.





We are showing, not even Australia, but worldwide that we are managing our country with the knowledge that has been passed down from generation to generation by our grandfathers and ancestors, and still is. Because we got modern, like using helicopter to burn, all season matches, drip torch, we are still using our same knowledge- when to burn, how to burn... We are doing the burning because our grandfathers did it before. Now they are gone, they taught us and we take note, now we are teaching our children, our future rangers, we are teaching them to take over our ranger program including fire. Fire management in our ranger program is very important because fire brings back life." – Clarry Rogers



## N.T. Bureau of Meteorology www.bom.gov.au.

rea Plan of Management 2015 - 2020. Darwin, N.

Ngandi Language Speakers (2000) Ngandi Seasons

(Kriol Workshop, ILMF 18/1/00). NT.

(Mara Workshop, ILMF 18/1/00). NT

(Ngandi Workshop, ILMF 18/1/00). NT.

Kriol Language Speakers, O'Donnell R (2000) Kriol Seasons

Mara Language Speakers, O'Donnell R (2000) Mara Seasons

Nunggubuyu Language Speakers (2000) Nunggubuyu Seasons

Roberts BN, Daniels CW, Roberts FM, Joshua I et al. (2018) Alawa, Marra and Warndarrang plants and animals: Biocultural Knowledge Daniels C, Mardulpu S, Thompson S., et al. (2018) Ngandi and Ngalakgan Plants and Animals: Biocultural Knowledge of Flora of Flora and Fauna from Naukurr. Numbulwar. Minverri and Limmen and Fauna from the Rose, Wilton, Roper and Phelp Rivers, North National Park, North Australia. Ngukurr Language Centre & Australia. Northern Territory Government - Department of Department of Environment and Natural Resources, N.T. Environment and Natural Resources, Palmerston

Wilfred A, Wilfred N, Gibbs T, Rogers R et al. (2000) Ritharrnu/ Gambold NJ (2015) South East Arnhem Land Indigenous Protected Wagilak Seasons (Workshop, ILMF 18/1/00). NT

Yugul Mangi Rangers, Ngukurr Yangbala Project, Macquarie University, Ngukurr Language Centre (2017) Draft Cross-cultural guide to some animals and plants of South East Arnhem Land. NT Australia

#### **DESIGN & ILLUSTRATIONS**

Kerry Hardy (BlackSheep Studio E: kerryhardy@yahoo.com). The initial Fire and Seasons Calendar template was developed by Jacqueline Gothe, Lyndall Harris and Sian Hromek, supported by the Firesticks Project, firesticks.org.au

#### INDIGENOUS CULTURAL & INTELLECTUAL PROPERTY

The language and information, including its visual representation contained in this publication includes the traditional biocultural knowledge, cultural expression and references to biological resources (plants and animals) of the peoples of the Ngandi, Wubuy (Nunggubuyu), Ritharrŋu/Wagilak, Marra, Ngalakan, Alawa, Rembarrnga, Warndarrang and Roper River Kriol language groups. The information is shared by Elders for the purposes of knowledge preservation, general education and language maintenance. **CONTRIBUTORS & PARTICIPANTS** 

### Irene Andrews, Mrs C W Daniels, Janita (Nina) Gavkamangu

Norman Wilfred, Roy Wilfred, Hazel Farrell, Clarry Rogers, Kelvin Rogers, Benjamin Wilfred, Jim Wilfred, Julie Roy, Winston Thompson Anthony Daniels, Walter Rogers, Karmelina Daniels, Linda Hall, Melissa Andrews, Rhondelle Geoffrey, Francine Hall, Martina Hall, Jessica Silver, Valmai Langarama Rogers, Arnold George,

Ruth George, Simon Ponto, Braidan Miller, Davis Wilfred, Stuart Daniels, Maritza Roberts, Grace Daniels, Wally Wilfred, Daphne Daniels, Bert Rami, Renelle Rogers, Jana Daniels, Shanine Rogers, Clayton Munur, Catherine Whitehead, Ryan Clarke, Roy Natilma Andy Lukuman Peters, David Wilfred, Peter Wilfred, Dean Austin Bara, Celeste Humphris, Ngukurr Language Centre.

The compilation of the information was undertaken by Michelle McKemey as part of her PhD research at the University of New England under the supervision of Dr Emilie Ens. Mr Oliver Costello, Dr Mal Ridges, Dr John Hunter and Professor Nick Reid.

Catherine Whitehead, Julie Roy, Yugul Mangi Rangers, Emilie Ens, Michelle McKerney, Julie Burgher, Paul Freed, Dan McIntosh, Fir0002/Flagstaffotos, Stephen Barnett, Parks Australia, Keith Townsend, JJ Harrison, Antano, Mark Marathon, Peripitus, John Tann.

AUTHORS Yugul Mangi Rangers and Ngukurr Community with Michelle McKemey and Emilie Ens

#### COPYRIGHT © Yugul Mangi Rangers 2019.

This poster is licensed under Creative Commons Attribution NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) https://creativecommons.org/licenses/by-nc-sa/4.0/legalcode You may reproduce, distribute and remix this work for noncommercial purposes as long as any derivatives are released under

Creative Commons. CC BY-NC-SA 4.0

the same license, and you reference the work as follows: Citation: McKemey, M., Yugul Mangi Rangers, Ngukurr Community and Ens, E. (2019) Yugul Mangi Faiya En Sisen Kelenda (Yugul Mangi Fire and Seasons Calendar). University of New England, Armidale NSW. DOI: 10.25952/5dd1b81581d98 Released under

#### FOR MORE INFORMATION Yugul Mangi Rangers, Caring for Country Branch, Northern Land Council

Tel: (08) 8975 4944 E: Yugulmangi@nlc.org.au South East Arnhem Land Indigenous Protected Area Tel: 0484 628 413 E: sealipa@nlc.org.au

#### Michelle McKemey

University of New England (Armidale NSW) Melaleuca Enterprises Environmental Consultancy Services Tel: 0437 350 597 E: michellemckemey@gmail.com

## Emilie Ens

Macquarie University (NSW) Tel: 0411 051 642



E: emilie.ens@mg.edu.a

