

Bushlight remote power systems survive cyclone Ingrid



Dave Claudie and family with his Bushlight RE power system at Chuula, Cape York.
(Pictures are pre cyclone)

On 9th March 2005, Cyclone Ingrid travelled west down the Archer River, Cape York, Queensland. The eye of Ingrid passed over Chuula, Bushlight's first Peninsula RE system installation site.

David Claudie, traditional owner of Kaanju Homelands was able to track the path of Ingrid on his computer so was well prepared when it hit.

David said that when the winds started to give warning that Ingrid was getting closer, he carried out an emergency shut-down of his system in case of storm damage. Once Ingrid had moved west from the community and after a quick call to Bushlight, Dave had power back on with no cyclone damage at all.

The Bushlight ground mounted solar panel array proved worthy of the cyclone's category 5 rating and withstood the force of Ingrid.

Two homelands in the Top End also had a close call with Cyclone Ingrid as it made its way across northern Australia. Bawaka (East Arnhemland) and Galawdjapin (Ramingining) luckily missed out on the brunt of the cyclone, but they did experience severe weather conditions. The Bushlight systems installed at both sites withstood the conditions and operated throughout the cyclone with no problems.

(For more information about Kaanju Homelands and Chuula community, Cape York, see www.kaanjungaachi.com.au.)

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Basic maintenance courses for RE systems commenced

Bushlight is delivering a one week course covering basic maintenance of remote area power systems (RAPS).

The course is targeted at people without electrical or RE training who service community infrastructure including RE systems. It provides participants with skills to undertake non-technical maintenance of systems and covers basic electrical concepts, description of the major components of RE systems, solar panel and battery maintenance, trouble shooting user problems and working safely around RE systems.

Course participants have included homelands council or resource agency staff and people who have a RAPS and want a better understanding of how their system works.

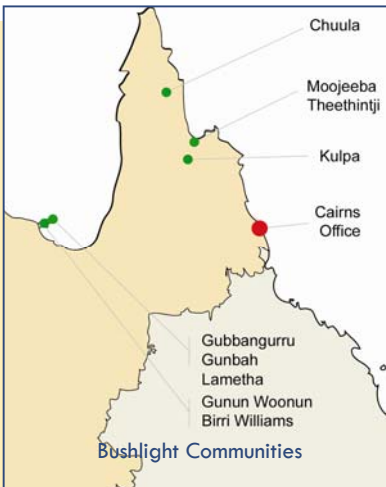
Ken Turner from Bushlight coordinates the course program and delivers the course. It is free (participants pay their own travel and accommodation costs) and is provided on-site or in regional centres to make attendance easy. For information about this course, contact Bushlight on 08 8951 4344.



Ken Turner, Bushlight (left) with training group, Broome, April 2005

Light and Life in the Bush

North Queensland



Cheryl Prestipino has taken over from John Hopkins as Bushlight's north Queensland regional manager, after John suffered a serious leg fracture.

As mentioned in the lead story on page 1, cyclone Ingrid passed over Chuula, Bushlight's first Peninsula RE system installation site. Dave Claudie and family were safe throughout and the Bushlight system survived unscathed and was back on stream soon after Ingrid had passed.

Energy planning for Mornington Island homelands Gunbar and Gubbangurru was completed with a visit to finalise system designs with residents for each place.

While on Mornington Island, Bushlight also started working with Matthew and Valerie Peters and family at Lametha to improve their energy services.

Bushlight has also delivered the basic RE system maintenance course (see page 1) to participants on Mornington Island and from the Coen Regional Aboriginal Corporation in Coen, Cape York.



Lopping trees shading PV panels

In the same trip, installations at Birri Williams and Gunun Woonun were visited to download performance data from the RE systems and to discuss system performance with families at each site. It became apparent that trees can grow very quickly in the tropics (a couple of metres a year) and a very close eye has to be kept on potential shading of solar panels.



Valerie Peters with William and Alquin talking to Sue Graham from Bushlight

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Kimberley



Dingo Springs Bushlight RE system

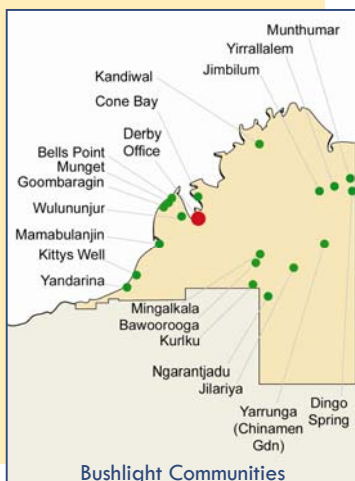
Bushlight staff John Schmidt and David D'Antoine talked to residents at Dingo Springs about their Bushlight RE System on a regular visit, 3 months after it was installed.

They found everyone happy with the system because it was saving them money on diesel and the trouble with transporting fuel in their personal vehicles. They also told us they think it's good for the environment because it doesn't create pollution.

leaving appliances switched off, the batteries were able to recharge.

Bushlight has also organised two basic RE system maintenance courses. The courses will be run over the first two weeks of April in Broome and Kununurra (see story page 1).

Bushlight is now working with 11 communities across the Kimberley. These are Jilariya, Kittys Well and Yandarina, Goombaragin, Munget, Kandiwal, Jimbilum, Mingalkala, and Bawoorrooga and Yarrunga (Chinamen Gardens) and Larinyuwar (Cone Bay).



Residents were able to spend the full wet season at Dingo Springs without a back-up generator. During a week of heavy cloud they did lose power to discretionary circuits (which powers fans and some lights), although the system continued to provide essential power to their refrigeration and main light.

Based on the training John and Dave provided when the system was installed, they were able to look at the voltmeter and work out that they needed to reduce their power use until the batteries were able to recharge when the sun came out. By



Discussing community energy needs at Kandiwal, WA

Top End

Zoe Pilven welcomes two new staff, Ian Foster and Ken Aitchison, to Bushlight's Top End regional team.

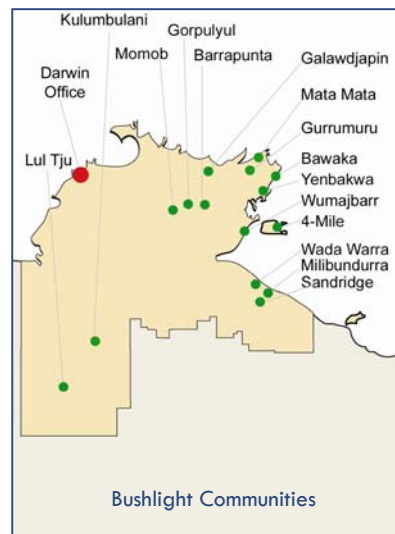
In early March, Bawaka (East Arnhemland) and Galawdjapin (Ramingining) homelands had a close call with Cyclone Ingrid. As described in our page 1 story, the Bushlight RE system at both sites withstood the weather and continued to operate with no problems throughout the cyclone.

Zoe, Ian and Ken are currently working with Barrapunta, Momob and Gorpulyul (Central Arnhemland), 4 Mile and Yenbakwa (Groote Eylandt) and Wada Warra (South West Gulf) homelands to improve their energy services. A further five homelands will commence over the coming months.

In late 2004, Bushlight commenced working with Mata Mata and Gurrumuru in East Arnhemland, Lul Tju (near Lajamanu), Kulumbulani (near Victoria River Downs) and Wumajbarr (South East Arnhemland). Delivery of energy services for these homelands is now at the stage of tendering for system supply and installation.

As in all Bushlight regions, Zoe and her team are making regular homeland visits to ensure that everyone is satisfied with their energy services. They use the visits to provide extra training if necessary and to resolve any problems users have with their energy services.

(Note - Bushlight regional staff visit every homeland 4 weeks after a Bushlight system is installed, then at least once every 3 months, or more often if required, for the rest of the year. Two system maintenance services are also coordinated during this period)



Billy and his family at Kulumbulani, Top End during a recent visit to the top end to discuss energy service options

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Central Australia

On the 3rd of March the Centre for Appropriate Technology hosted a visit by His Royal Highness, Prince Charles. Prince Charles has had a long standing interest in the work of appropriate technology organisations like the Centre for Appropriate Technology (CAT).

Bushlight was a key part of CAT's display and we invited Syd Kenny and Connie Breadon and their family from Mt Peachy outstation to be part of our presentation. Mt Peach was one of Bushlight's first installations. Bushlight's Operations Manager, Grant Behrendorff, provided Prince Charles with an explanation of the Bushlight project, including a rundown of Bushlight's Community Energy Planning process and a Bushlight RE system set up for the day.

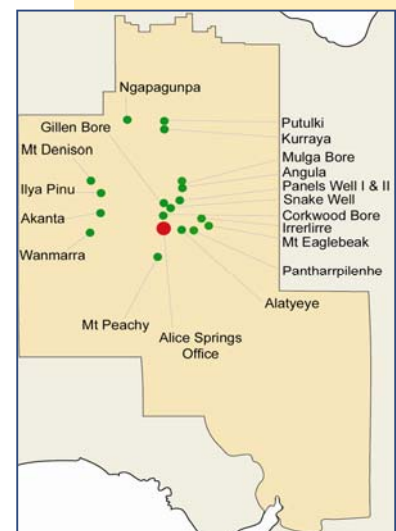
Bushlight's Tony Renehan recently visited Ngapagunpa Outstation, 90 kms west north west of Tennant Creek and talked with the old men there. One of the men, Bindi told Tony he hadn't had to go to town for diesel since the installation of the system over 3 months ago and that he was very happy about this.



HRH Prince Charles being met by Mr Jim Bray, Chairman Centre for Appropriate Technology

Staff at Julalikari Council also told Tony that they'd received regular visits and calls from Ngapagunpa to fix the old generator. There were often problems with getting out to the community when it was wet and in transporting the genset to or from the community.

Both the old men of Ngapagunpa and the staff of Julalikari now have a high level of satisfaction with Ngapagunpa's energy services.



Bushlight RE System Installation Program

BUSHLIGHT ADMINISTRATION
PO Box 8044
ALICE SPRINGS NT 0871
Phone: (08) 8951 4344
Fax: (08) 8941 4333
enquiries@bushlight.org.au

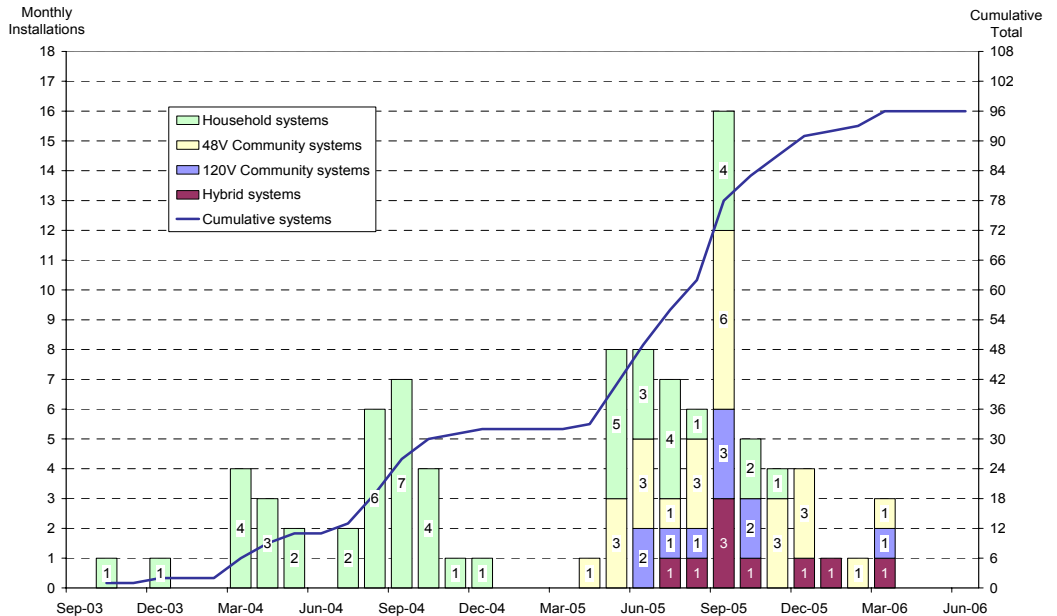
Central Australia
32-38 Priest St
PO Box 8044
ALICE SPRINGS NT 0871
Phone (08) 8951 4342
Fax (08) 8951 4333
rmcentral@bushlight.org.au

Top End
Suite 1/20 Knuckey St
GPO Box 2875
DARWIN NT 0801
Phone (08) 8981 7599
Fax (08) 8981 7233
rmtopend@bushlight.org.au

Kimberley WA
3/68 Clarendon Street
PO Box 1304
DERBY WA 6728
Phone (08) 9191 2585
Fax (08) 9191 2598
rmderby@bushlight.org.au

North Queensland
7/330 Sheridan Street
PO Box 6182
CAIRNS QLD 4870
Phone (07) 4031 0505
Fax (07) 4031 0431
rmcairns@bushlight.org.au

Technical Services
Murdoch University
South Street
MURDOCH WA 6150
Phone (08) 9360 7351
Fax (08) 9360 2204
techserv@bushlight.org.au



Bushlight RE system installation program to ramp up for dry season

Bushlight's RE system installation program is scheduled around the northern wet season, which accounts for the gap in installations from January to March 2005 shown in the above chart.

Unfortunately, Bushlight expects that this will create further challenges for scheduling both the backlog from this period and installations arising from Bushlight's ongoing community energy planning.

Two key challenges are emerging. First, finding sufficient remote area installation contractors may prove to be difficult.

Bushlight is attempting to increase the network of RE service providers by working with the The Australian Business Council for

Sustainable Energy BCSE to enable experienced RE contractors attain RE accreditation through recognition of prior learning and experience.

The other major challenge is the capacity of RE component suppliers to meet the demand created by Bushlight's installation program.

Bushlight is working closely with component suppliers to ensure they are aware of Bushlight contractors' future component requirements.

RE system suppliers and contractors interested in tendering for Bushlight work should contact Lyndon Frearson, Bushlight, on 08 8951 4341.



Fitting cables at Bawaka, Top End, NT



Laying cable at Chuula, Cape York, Qld



Solar array, Mt Peachy, Central Australia

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