Overview of AMRRIC

Animal Management in Rural and Remote Aboriginal Communities Incorporated (AMRRIC) works in partnership with a range of stakeholders to facilitate sustainable, culturally-sensitive and professional animal health programs in Aboriginal communities. It aims to improve community health by improving the health of animals. AMRRIC is closely associated with veterinarians, research bodies and government on all levels and actively engages in education as an important aspect of sustainable outcomes. AMRRIC is the only such independent organisation currently working nationally in this field.

Background

AMRRIC was contacted by Jeff Colver, Director of Infrastructure, West Arnhem Shire Council (WASC), to urgently address problems in the community of Warruwi NT. Warruwi community is located on South Goulburn Island, off the north coast of West Arnhem Shire. Identified shire problems relate to the health and state of the dogs and in particular the number of cheeky dogs. We note that this undertaking is an interim Shire measure. From meetings held with the Shire a strategic Animal Welfare and Control plan is being developed, to be available in March 2009. The work undertaken in this interim measure focuses on developing sustainable programs. It will provide raw data to enable the Shire to develop their Strategic Plan.

Contact was made with AMRRIC member Dr Judith Mulholland BSc VMS, who has provided veterinary support to both Warruwi and Minjilang communities on two previous visits. During her most recent May 2008 visit, Dr Mulholland visited both communities desexing and treating dogs. She has provided a written work report and has included a list of recommendations.
AMRRIC’s Warruwi Community Interim Dog Health Program proposal was accepted by Jeff Colver. Arrangements were made with Anne Perry, Administration Manager, Warruwi Community. Consequently Dr Jude Mulholland, Dr Jan Allen (AMRRIC Program Manager) and a veterinary nurse were organised to carry out the program from 21 to 24 October 2008.

Unfortunately this visit was cancelled just prior to the schedule due to grave close family illness. In response to the urgency of the community’s need, highlighted by Jeff Colver, AMRRIC was fortunately able to engage the skills of Dr Stephen Cutter, The Ark Animal Hospital, at relatively short notice.

Warruwi experienced a Dog Health Program from Nov 3 to 7, 2008 supported by the skills of Dr Stephen Cutter, Dr Jan Allen (AMRRIC) and Aaron Tucker (veterinary nurse).

Dog Health program Objectives

Urgent Warruwi Community problems identified by WASC were the health and state of dogs and in particular the number of cheeky dogs. Improved overall community safety is the main objective.

Program Links with Research

During this visit the veterinary team supported Menzies School of Health, Darwin, by taking blood samples, skin scrapings and skin swabs of several surgery cases. The research being supported is in scabies antigens and Streptococcal and Staphlococcal skin infections.

The Dog Health Program Components

1. The Team

The DHP visit started on 3rd November 2008. Program team members included:

- Dr Jan Allen, Program Manager AMRRIC
- Dr Stephen Cutter, The Ark Animal Hospital NT
- Aaron Tucker, The Ark Animal Hospital NT.
Mardbalk Marine Rangers had the responsibility of providing local support staff. Local staff are strategic in engaging the support of the community and, with training, ensure sustainable Dog Health Programs. For the first two days there were 2 to 3 enthusiastic helpers. Each day staff changed. On Nov 5 we were informed that the previous workers who by then had been trained would no longer be available and some female staff would support us. The support did not continue after the morning.

2. Community Consultation, Scoping and Promotion of the Program

Anne Perry organized a poster advertising the vet visit to be placed in several public areas including the health centre and outside the shop. Most agencies in town were notified of the veterinary visit. The Marine Rangers team did a preliminary survey of Warruwi which gave dog numbers and mange condition in several households. They were able to develop an idea of the main community dog problems. The team also prepared and cleaned the old health centre premises for a dedicated surgery area. Most community members were well aware of the visit and the veterinary team was generally greeted with cooperation and enthusiasm.

3. The Veterinary Program

On the first day the team was enabled by support workers to engage with members of almost every household. The community dog population and the peoples' needs were ascertained. Over the period Nov 3 to 7, 2008 the veterinary team was able to carry out:

- A dog population survey - numbers, body condition and mange score
- Treatment of all those dogs with Ivermectin to control internal parasites including:
  - Roundworms (*Toxacara canis, Toxascaris leonina*)
- Hookworms (Ancylostoma caninum, Ancylostoma braziliense, Uncinaria stercoralis)
- Whipworms (Trichuris vulpis)
- Threadworms (Strongyloides stercoralis)
- Throatworm (Oslerus osleri)
- Tissue worm (Dipetalonema reconditum)
- Heartworm (Dirofilaria immitis),

And external parasites including:
- Sarcoptic mange/scabies (Sarcoptes scabei)
- Demodectic mange (Demodex canis)
- Brown dog ticks (Rhipicephalus sanguineus)

- Surgical Desexing of both male and female dogs as requested by owners
- Chemical desexing using Covinan - a temporary hormonal sterilization injection.
- Microchipping of desexed dogs. This is an investment in the future for identification of individual dogs.
- Collars, provided by International Fund for Animal Welfare (IFAW), were applied to every desexed dog.
- Euthanasia of unwanted and sick animals as requested by owners.

4. Education and Training

The veterinary visit encouraged community participation on all levels, with considerable enthusiasm from local people of all ages. During the first two days the local support staff were instructed in dog handling, preparation and administration of Ivermectin dosages, preparing dogs for surgery - clipping and cleaning the surgery sites, giving microchips and applying ear tattoos (animals are tattooed in the ear to show their desexed status).

A regular audience of adults and children watched the surgery procedures.

Results
## Table of Veterinary Procedures Nov 3-7 2008

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivermectin treatments</td>
<td>134</td>
</tr>
<tr>
<td>Surgical Desexings –Female dogs</td>
<td>19</td>
</tr>
<tr>
<td>–Male dogs</td>
<td>17</td>
</tr>
<tr>
<td>Chemical desexings</td>
<td>6</td>
</tr>
<tr>
<td>Euthanasias</td>
<td>7</td>
</tr>
<tr>
<td>Average Body Condition Score</td>
<td>5.2</td>
</tr>
<tr>
<td>Dogs with skin condition-mange</td>
<td>11</td>
</tr>
</tbody>
</table>

### Comments on Data

The number of dogs dosed with Ivermectin closely indicates the total of dogs in the Warruwi population. The dogs are in above average condition with an average Body Condition Score (BCS) of 5.2 (in the range of 1-9, 5 is ideal). As seen in the following graph, 75% of the dogs fall into the categories of a BCS of 5 or 6 ie **ideal or slightly overweight**.

There were about 10% of dogs exhibiting obvious signs of skin conditions (usually sarcoptic mange, dog scabies). There were a few dogs with ticks and fleas.

52 of the adult dogs in Warruwi had already been desexed - some were done on Croker Island and Gunbalanya but most were done during previous Goulburn Island vet visits. A
total of 36 dogs were surgically desexed during this visit. With a total of 88 desexed dogs in the community, this is almost 70% of the dog population. A variety of medical conditions were seen including several cancers (mainly mammary), lamenesses, healed broken legs, several scalings (nuisance dogs are often subjected to boiling water) and one bitch was taken by a croc at Cliff Camp during our visit. Several dogs in two households showed signs of Tranmissible Venereal Tumour (TVT).

Dogs offered for euthanasia included poor dogs (including a lactating bitch and her two pups), old dogs and unwanted half grown pups. Other animals seen on the community were a nanny goat and kid and all ages of brumbies, including a hand-reared yearling. All animals were in reasonable condition.

Outcomes
The Veterinary Program has succeeded in surgically desexing a large percentage of community dogs. It has also removed several sick and unwanted animals. The entire population has had a dose of Ivermectin, an antiparasitic that is effective against a wide range of internal and external parasites. This should further improve body and skin condition and consequently the health and state of dogs of Warruwi.

Access to a program such as this on a regular basis empowers the Indigenous community to have control over dog population numbers and most importantly their human and environmental health and safety. A consequence of this visit will be a reduction in dog numbers, environmental faecal contamination, pack behaviour (including attacks on other animals of the community), unrestrained breeding and TVT, territorial aggression, public nuisance (noise, rubbish spread, fights), zoonotic disease, sick and dying unwanted puppies to name a few. The main objective is to improve overall community safety. Generally not only is there an improvement in the health and welfare of the dogs but also of the community itself.

Recommendations
AMRRIC recommends:
• The continuation of the regular Vet Program twice yearly (including Minjalang also) to ensure a sustainable benchmark. AMRRIC member Dr Judith Mulholland is keen to continue her good work in these two communities.
• Training of at least two community support staff. These assistants will enhance future vet programs by encouraging engagement and compliance by the community. They will also be able to carry out interim intestinal worm and mange control programs.
• Development of a Strategic Animal Welfare and Control Plan that focuses on sustainability.
• Household encouragement to limit community dog numbers to reduce pack behaviour.

Thanks to the support of the Mardbalk Marine Rangers and the Warruwi Council.

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A copy of this report will be forwarded to:
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• Anne Perry, Warruwi Council
• Dr Jude Mulholland
• Scott Thompson, FaHCSIA
• AMRRIC EO
• IFAW
• Dr Stephen Cutter