

# *Far North Coast Bromeliad*



## *Study Group N.S.W.*



Study Group meets the third Thursday of each month

Next meeting 16th January 2020 at 11 a.m.



Venue: PineGrove Bromeliad Nursery

114 Pine Street Wardell 2477

Phone (02) 6683 4188



Discussion: December 2019

Christmas Get Together



### **Editorial Team:**

Ross Little  
Helen Clewett  
Drew Maywald  
Michelle Hartwell



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## **Meeting 21st November 2019**

The meeting was opened at approximately 11.00 am  
The 12 members present were welcomed.  
A total of three apologies were received.

### **General Business**

Ross welcomed 12 participants to the meeting with apologies from three regulars who were not able to attend because of the disastrous bushfires in the area.

Ross mentioned that he was asked if our Group would be willing to host the Australasian Bromeliad Conference in four years-time, but the Group felt that it was too big an undertaking for such a small Group and would stretch our resources enormously. So it was a NO.

### **Show, Tell and Ask!**

Ross showed the Group an unusual crested *Aechmea fasciata*, with multiple inflorescence heads fused together coming from the centre of a single plant.

He also showed the Group a spineless *Aechmea* with a crested inflorescence (crested = multi headed) that is possibly *Aechmea* 'Inca' with spineless foliage and red inflorescence. A similar plant with pink inflorescence was also available at the same release time possibly *Aechmea* 'Maya'. Ross said he found that *Ae.* 'Inca' was difficult to flower for him and has taken up to 10 years to do so. This is possibly due to the plants having come from tissue culture. John on the other hand, said his *Ae.* 'Inca' flowered every two years. (photos p.7)

Also on show was *Pitcairnia undulata* with its broad leaves and two inflorescence stems, with no secondary leaves and compared it with *Pitcairnia flammea* which had secondary leaves which are deciduous. These plants are best grown in a mix with plenty of coco fibre and they must be kept moist. In their natural habitat *Pitcairnia*s are often seen growing prolifically like grasses on the sides of roads.

Ross also presented *Sincoraea burle-marxii* to the Group with its red flushed centre and white flowers, a beautiful silver plant which makes a nice grouping display. This is a plant that can be grown in full sun in the garden.

A *Aechmea chantinii* hybrid was shown in all its glory of reddish brown leaves with silver banding, a cross created by the birds which needs to be registered now that it has proven to be stable, named *Aechmea* 'Red Bird'. (photo p.10)

There was general discussion about the effect of ash and the smoke from the bushfires on our Bromeliads. The best thing to do is to simply wash the ash into the Bromeliad which will use it as fertiliser. As far as the effect the smoke may have on your Bromeliads one would need to know their normal flowering cycle to be sure the smoke has had any effect at all.

Discussion was held about watering your Bromeliads during the drought we are presently experiencing. One point that was made is, if you are watering your plants less as a result of the drought and many are surviving well, then continue this watering scheme once the drought has ended. For those plants that aren't handling the drier conditions an increase of your watering practices may be needed to keep up the humidity those plants require.

Our watering practices led to a discussion about mosquitoes in our Bromeliads and how the wrigglers do not survive if a predator called a mesocyclops is living in your Bromeliads water wells feeding on mosquito larvae.

The following taken in part from FNCBSG NSW Newsletter January 2012:  
"Bromeliads and Mosquitos by Rob Smythe M.Sc.

#### **What are Mesocyclops?**

Mesocyclops are found in the bromeliads with clearer water. These have only recently been discovered as a mosquito predator by Dr. Michael Brown working at the Queensland Institute of Medical Research. They are very small and just visible to the naked eye. They zig and zag about often carrying two large egg sacks. Several researchers are using these creatures to study mosquito breeding in mine shafts and water tanks. These fellows keep my bromeliads free of mosquitos right through the year up until the heat and heavy rains of summer. They are now gone, dead or washed out of my bromeliads. They do not like putrid conditions and do best in clearer waters in cooler conditions, however they can be replaced after the heat of summer."

To minimise the mosquito problem regularly maintain your yard and shade houses, don't leave water lying around or leave lots of decaying vegetative matter build up about that is likely to hold moisture and encourage mosquitoes and larvae, avoid leaving unused water holding vessels about will also help minimise the mosquito problem.

Drew talked about an article that John Crawford recently came across in a Journal of Horticultural Science, Vol. 32,(2), April 1997 by Bernhard Bessler. The article was about a scientific study using a chemical called 6-Benzylaminopurine (BAP) to induce Tillandsias to multiply rapidly. Bessler showed that Tillandsias treated with BAP had more than double the number of pups compared with the control group over 105 days.

The article has inspired John and Drew to undertake a study of eight different Bromeliads (24 in total), treated as described by Bessler, and meticulously record the results against a control group of the same plants. They are also going to set up a third study group which they will treat with Powerfeed and compare those results against the BAP group and the control group. This study will commence in the last week of November 2019, John and Drew will report back to the FNCBSG during the course of the study, and when it is completed.

“The Use of 6-Benzylaminopurine for Rapid Multiplication of Tillandsias”.

Bernhard Bessler [Research scientist, Dr.rer.hort.].

Institute of Floriculture, University of Hannover, Herrenhäuser Str. 2, 30419 Hannover Germany.

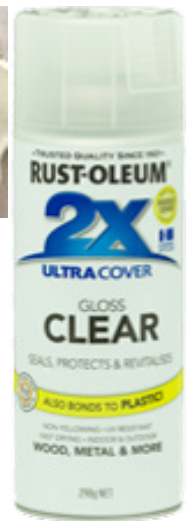
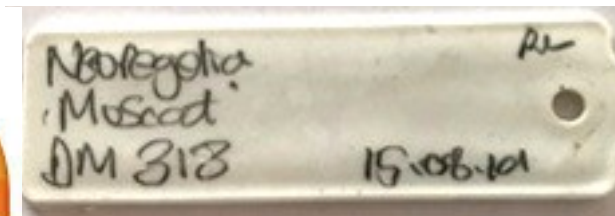
Drew gave a demonstration and talk about recycling plant name tags which is summarised here by Drew:

When I started collecting Bromeliads in December 2017, I bought some plastic name tags and expensive permanent markers to write the plant names on the tags. Unfortunately, the ‘Permanent Markers’ proved to be temporary as after only 2 years, many of my tags had faded so badly I could no longer read the plant names. Luckily I take a photo of every Bromeliad when I acquire it and put it in my Bromeliad register, so I was able to identify all my plants. Like all Bromeliad enthusiasts I wanted to find an inexpensive way to make my plant names more permanent.

I used a 4B pencil which gave me a good clear name and then looked to see if I could coat the tag with a clear lacquer to protect the name even further. I bought some Rust-Oleum 2X Ultra Cover clear lacquer in a spray can from the paint section of Bunnings, and sprayed each named tag and then allowed them to dry. The result was a clear film which protected the name and could not be wiped off with a cloth.

I chose The Rust-Oleum 2X lacquer because, while it is not the cheapest product available at around \$12.00 a can, it is the best to use for outdoor applications. I also found that spraying each tag twice, increased the thickness of the lacquer. You can buy the lacquer in a gloss or satin finish. I chose the gloss finish simply because I could easily tell which plants I had relabeled and sprayed with lacquer. The lacquer takes around 15 minutes to dry but I left mine for at least 2 hours to ensure that the lacquer had dried completely, before putting it in the plant pot. The lacquer reaches maximum adhesion and durability in 5 to 7 days, after which time it is very difficult to remove the name even with orange oil.

Having solved my durable plant tags problem I then looked for the best way to clean my old tags so that I could re-use them, rather than buy a whole lot of new ones. John Crawford suggested that I use orange oil which is available at major supermarkets (around \$7.00 for 110ml). This product removed all the dirt and old writing, whether in pencil, permanent marker or pen, quickly and easily restoring the tag to a pristine condition. I simply put some orange oil on a cloth and rubbed it over the tags, and then wiped each tag with a dry cloth to wipe off any excess oil. For really dirty tags I applied a couple of drops direct onto the tag with great results so I tried it on some tags that were more than 6 years old with the same amazing success.



So far I have done more than 500 plant tags and I am now doing the same with tags for vegetable seeds and herbs. When I plant seeds I now write the name of the plant on a tag in 4B pencil or a felt pen, spray it with Rust-Oleum and write the date when I planted the seeds on the back of the tag, which can be cleaned off with Orange Power later if need be.



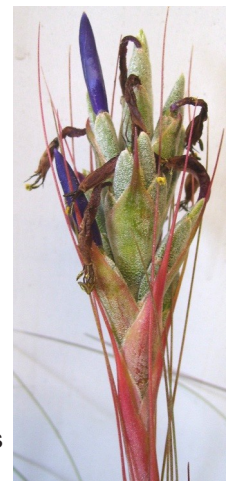
Drew brought along a Tillandsia in flower for identification, being silver not green it was suggested as being:

*Tillandsia juncea*. (Ruiz & Pavon) Poir., Encycl. Suppl. 5: 309.1817.

Distribution:

Terrestrial and epiphytic, 5-2416 m alt, Mexico and the Greater Antilles to Bolivia.

*Tillandsia* ‘Juncifolia’ is a small green form with longish stolons, it is now treated as a cultivar, check Bromeliads in Australia photo index for discussion.



John Crawford brought in an unusual plant called *Edmundoa ambigua* which he grows in a shady position, where he finds it pups well for him. The inflorescence has a light brown or pale-lanate - woolly appearance and could be mistaken for being post floral - dead, until one notices the white petals of the flowers when they appear. This is a plant that John collected from Ross some years ago, that's not often seen in collections.



*Edmundoa ambigua* (Wanderley & Leme) Leme, comb. nov. Canistrum Bromeliads of the Atlantic Forest 42-55. 1997.



Distribution and habitat: Endemic to the moist Atlantic slope forest in southern Rio de Janeiro state and neighboring areas of Sao Paulo. It is an epiphyte of the forest understory, but also grows on the trunk and branches near the canopy. It is more common at altitudes over 800 m, flowering from December to March. This species has a scattered distribution and does not usually form clumps.

Michelle brought along her beautiful *Neoregelia* 'Bullis's Margaret' to show us its great colour. (photo by Michelle Hartwell)

From the BCR: "Said to have links to 'Royal Burgundy'. Apparently a tissue culture variegated sport of some hybrid. Marketed by Bullis Nursery as Neo. 'Margaret' but no link to Mulford Foster's Neo. 'Margaret'. Renamed by D. Butcher."



*Neoregelia* 'Painted Delight' grown by Coral McAteer



*Neoregelia* 'Jaws' grown by Keryn Simpson



*Sincoraea burle-marxii* grown by Ross Little



*Neoregelia* 'Highland Fling' grown by Dave Boudier



*Aechmea* 'Inca' ???



Ross' multi headed *Aechmea fasciata*

1st Novice and  
Judges Choice  
Michelle Hartwell



*Neoregelia*  
'Rockin' Robyn'  
1st Open  
Jennifer Laurie

*Quesnelia*  
'Tim Plowman'



'Logged On'  
1st Decorative Keryn Simpson



*Tillandsia*  
'Leiboldiana Pendant'  
1st Tillandsioideae  
John Crawford



*Quesnelia* 'Raphael Oliveira'  
grown by John Crawford



*Tillandsia paucifolia*  
grown by Gary McAteer



*Tillandsia flabellata x streptophylla*  
grown by Helen Clewett



'No Not the Bermuda Triangle'  
by John Crawford

'Triple Treat'  
by  
Dave Boudier



'Hair Today Till Tomorrow'  
by Drew Maywald



*Aechmea* 'Red Bird' unreg.  
by Ross Little



*Pitcairnia flammea*  
shown by Ross Little

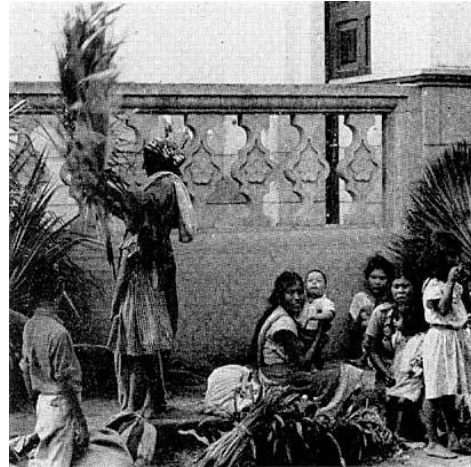


*Pitcairnia undulata* shown by Ross Little

## Tillandsias at Christmas Time in Honduras

Louis O. Williams

The country people of Honduras collect several kinds of ornamental plants from the forest and bring them into the markets about Christmas time each year. Bromeliads, orchids, palms, ferns and aroids are the families of plants most commonly brought in. Most of the showier tillandsias are in flower at about this time



of the year and are the most conspicuous plants in the market, due to their brightly colored bracts, and also are the most abundant. There are several *Tillandsias* that are commonly seen in the Christmas market. The commonest is *Tillandsia fasciculata*, probably because it is an attractive species and is exceedingly abundant in some places. In the vicinity of Comayagua there is a place in the xerophytic forest where there must be literally millions of individuals of this species in an area of perhaps a thousand acres.

*Tillandsias* from the high mountains are brought into the markets also but are always in smaller numbers for they are more widely scattered in the forests and quite often are on tall trees and difficult to secure.

The mountain species which I have observed in the markets in Tegucigalpa or Comayagua are the following: *Tillandsia punctulata*, *T. deppeana*, *T. fasciculata* var. *rotundata*, *T. lampropoda*, *T. ponderosa*, *T. orogenes* and *T. standleyi*.

These seven *Tillandsias* from the mountains and one from middle elevations are certainly a fine lot of species. The rarest one, *Tillandsia ponderosa*, is perhaps the showiest species which I have seen in the market and I have seen it only once. The photograph is of a specimen collected in the market in Tegucigalpa a year ago Christmas. The species is known to grow in Honduras in the San Juancito and Santa Barbara mountains, and doubtless occurs in other mountain groups here. *Tillandsia ponderosa* was originally discovered in Guatemala.



*Tillandsia ponderosa* collected from the market  
in Tegucigalpa, December 24, 1953.

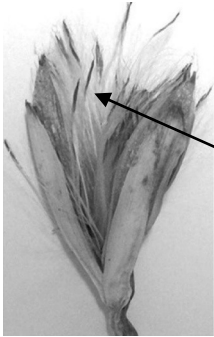
Taken from: BSI 1954 Vol.4 (6)

## Bromeliaceae – A Layman’s Guide Part 3

### The Tillandsioideae Genera

Pronounced *till-and-see-oy-dee-ee*, this sub family contains only 9 genera but has the greatest number of species, in excess of 1300. Most are epiphytic (air plants) or lithophytic (growing on rocks), or growing in trees and absorbing moisture and nutrients from the atmosphere. Bromeliads in the genera *Guzmania* and *Vriesea* are the more commonly cultivated members of this sub family.

Nearly all Bromeliads have specialized cell groups called trichomes which form scales on the foliage. The trichomes occurring on Tillandsioideae may cover the plants so completely that they appear grey or white, like Spanish moss. In addition to absorbing nutrients, the trichomes may serve to insulate the plant from freezing weather.



Plants in this group have smooth or entire leaf margins (smooth edges), unusual colour and markings, with many producing fragrant flowers. All their leaves are spineless (unarmed) and their fruit is a dry capsule containing plumose seeds which are usually dispersed by breezes. Feathery seed plumes help them to adhere to a suitable epiphytic surface for germination. This subfamily is probably the most derived with special adaptations for survival in very dry conditions, with many described as xerophytes (plants that can survive with little water even in drought conditions).

**Alcantarea:** pronounced *al-cant-ar-ree’a*, this genus was named for Dom Pedro d’Alcântara, second Emperor of Brazil. *Alcantarea*, are a genus of lithophytes, endemic to Brazil. Formerly a sub-genus of *Vriesea*, there are 42 species in the genus. Most species are ornamental and several are threatened due to habitat loss and over collection.

*Alcantarea* is a group of extremely large Bromeliads, some reaching sizes of 1.5m across with flower spikes 2.5m high. In their natural habitat they are often found perched on the beautiful high rocky cliffs of Brazil. They often rot if grown in too much shade and moisture.

One unusual characteristic of this group of bromeliads is their ability to produce small offsets from the base of the plant before maturity, commonly called **grass pups**. Grass pups can be carefully removed from the parent plant provided a section of the parent plant’s stem is taken at the same time. Large pups are easiest to remove; they are more fully formed as plants in their own right, with

little attachment to the parent. Some growers slide a fork between the pup and parent before cutting to aid in removal. Other growers wait until the grass pup clusters to grow in size, rather than removing at a smaller size.

*Alcantarea* require a good free draining potting mix. Plants are tolerant to most positions, with some varieties performing well in either full sun, or part shade. The best colours are usually achieved in high light. Foliar feeding with a liquid fertiliser produces good results, Thrive or Powerfeed work well.

An unusual feature of *Alcantarea* is that they lean to one side of a pot or garden bed. Even after they have been re-potted and centred in the pot, they lean to one side of the pot. One grower will swear that his *Alcantarea* move to one side of the pot. This tendency has been noted in habitat where they lean in towards the cliff face to spread their large water bearing load, which can exceed 60 litres. Rotating the plants as they grow will minimise this effect.

**Catopsis:** pronounced *ka-top-sis*, this is an epiphytic genus (air plant) named by Grisebach in 1864. The genus name comes from the Greek “kata” meaning hanging down, and “opsis” meaning appearance, often described as looking down. Perhaps this name is given to the genus because they are most often found taking a view from their perches high in trees. *Catopsis* is a genus widespread across much of South America from Mexico to Brazil, plus Florida and the West Indies. Often identified by its waxy leaves, there are 18 species in the genus.

Many *Catopsis* have adapted to their life in the trees by having deep vase like rosettes that trap debris and water. *Catopsis* is a relatively small genus of Bromeliads with only eighteen species and a few cultivars. Plants in this genus usually have rather soft, floppy, green leaves that form a vase like urn. On most plants, the bottoms of the leaves have a waxy appearance. The leaves often curl back and downward away from the plant. Typically, the leaves are spineless and flowers protrude from the centre on long stalks.

*Catopsis* are likely to grow the best when they are mounted on a substrate, but they can be grown terrestrially as well, but do not over water as they will get root rot and very quickly die. For the most part *Catopsis* love moist, humid environments. Some *Catopsis* prefer to take in full sun by dwelling in the tops of trees. Other species prefer shady lower branches. In addition to bright indirect light, *Catopsis* also prefer warm temperatures. These plants will not tolerate any frost.

*Catopsis* don’t require much feeding, but they will benefit from an application of fertilizer formulated for bromeliads during the spring and summer months. This is when the plants are actively growing.

*Catopsis berteroniana* is one of only a few bromeliads that are considered carnivorous. These bright yellow plants are found at the top of trees above the canopy, where they trap insects in their central urn. There the insects drown and become a sort of nutrient soup as they decompose. It is debated as to whether or not this plant is truly carnivorous, but it is clear that insects are an important part of this bromeliad's diet.

**Glomeropitcairnia:** pronounced *glom-airo-pit-cairn-ee'a*, the genus name is from the Latin "glomero", meaning to form into a ball, and was named by Mez in 1905, because its clustered flowers resemble those of Pitcairnia. Glomeropitcairnia are mostly epiphytic but of tremendous size. It has two known species, native to Trinidad and the Lesser Antilles, *Glomeropitcairnia penduliflora* and *Glomeropitcairnia erectiflora*, where they grow in a very foggy and humid environment at an elevation of 1,100 metres.

Among tank Bromeliads, Glomeropitcairnia, are noted as being able to store the most water, up to 20 litres (5 gallons), providing a water source for other biota, especially the environmentally sensitive El Tucuche – The Golden Tree Frog, *Phyllodytes auratus*.

**Guzmania:** pronounced *guz-man-nee'a*, this popular genus was named in 1802 by Ruiz and Pavon for the Spanish pharmacist and naturalist, Anastasio Guzman. Guzmanias are native to Florida, the West Indies, southern Mexico, Central America and northern and western South America. They are found at altitudes of up to 3,500 metres (11,483 feet) in the Andean rainforests in Colombia and Ecuador. The genus contains 218 species.

Guzmania are mainly evergreen, epiphytic perennials. Several species are cultivated as indoor and outdoor garden types. The best known of these is *Guzmania lingulate* which bears orange and red bracts. The plant dies after it has flowered (in summer in habitat), but new plants can easily be propagated from the offsets or pups, which appear as the parent plant dies. Guzmanias require warm temperatures and relatively high humidity. Fatal root rot can occur in the plants of this genus if the roots get too wet and cold.

Guzmania can be either mounted on a substrate or planted in a pot. Because *Guzmania* roots act primarily as an anchor rather than a source for water and nutrients, if they are planted in a potting mix that remains too soggy they will easily succumb to root rot.

Guzmania take in water through their central tank and leaves in addition to their roots. Keep water in the bromeliad's tank, the space where the leaves meet and form a cup toward the base of the plant. Never put water in the bracts or flowering portion of the plant. It will shorten the life of the inflorescence.

Because Guzmanias are native to tropical areas, they prefer warmer temperatures and humidity. The genus should not be allowed to stand in temperatures lower than 15 degrees Celsius, and prefer temperatures between 21 and 27 degrees Celsius.

Like most bromeliads, Guzmanias will flower only once showcasing a long-lived bloom before it begins to die. A healthy plant will produce pups before it dies.

Guzmanias do not suffer from many pests especially when grown indoors. However, a Guzmanias that is not kept at ideal temperatures and humidity can be more susceptible to root rot, mealybugs, and aphids.

**Mezobromelia:** pronounced *mez-o-bro-meel'ee-a*, the plants in this genus are a rare species of Guzmanias-like epiphytes, described by L. B. Smith in 1935 to honour Carl Christian Mez, a German botanist (1866 – 1944). Native to the West Indies and northern South America the five species of this genus are rare in cultivation.

**Racinaea:** pronounced *ra-seen-ee-uh*, Racinaea is named in honour for Racine Foster (1910-1991) who with husband Mulford B. Foster, collected more than 200 new species of Bromeliaceae, founded the Journal of the Bromeliad Society, and authored the book, "Brazil, Orchid of the Tropics", and cofounder of the BSI. There are 79 species in the genus.

The unique set of characters that readily distinguish Racinaea from other Tillandsioideae genera are small and inconspicuous flowers, with the flower spikes arranged in two ranks and asymmetric sepals which are broadest towards the apex. The stamens and pistil are included in the corolla, but are shorter than the petals.

—: continued next month

#### **Where do I Find the Dates ?**

**[www.bromeliad.org.au](http://www.bromeliad.org.au)** then click "Diary".

Check this site for regular updates of times, dates and addresses of meetings and shows in your area and around the country.

#### **Web Links for Checking Correct Identification and Spelling ?**

Bromeliad Cultivar Register (BCR): <http://registry.bsi.org/>

Refer to this site for correct identification and spelling of your hybrid or cultivar.

New Bromeliad Taxon List : <http://botu07.bio.uu.nl/bcg/taxonList.php>

Refer to this site for latest species name changes and correct spelling.

Bromeliads in Australia (BinA) <http://bromeliad.org.au/>

Refer to this site for its Photo Index, Club Newsletters, Detective Derek Articles.

Keep these web sites set as desktop icons for quick reference access.



## Novice Popular Vote

1st Michelle Hartwell  
2nd Drew Maywald  
3rd -----

*Quesnelia* 'Tim Plowman'  
*Quesnelia* 'Tim Plowman'

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## Open Popular Vote

1st Jennifer Laurie  
2nd John Crawford  
2nd Keryn Simpson  
3rd Coral McAteer

*Neoregelia* 'Rockin' Robyn'  
*Quesnelia* 'Raphael Oliveira'  
*Neoregelia* 'Jaws'  
*Neoregelia* 'Painted Lady'

## Tillandsioideae

1st John Crawford  
2nd Keryn Simpson  
3rd Helen Clewett

*Tillandsia* 'Leiboldiana Pendant'  
*Tillandsia* 'Redken'  
*Tillandsia flabellata* x *streptophylla*

## Judges Choice

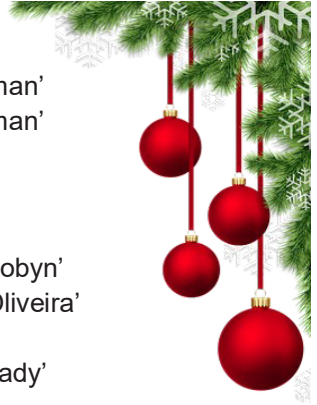
1st Michelle Hartwell

*Quesnelia* 'Tim Plowman'

## Decorative

1st Keryn Simpson

'Logged On'



**Merry CHRISTMAS**

and

**Happy NEW Year**

ALSO **THANKS** to

**ALL OUR MEMBERS**