



# CARP VIRUS

## (CY-HV3)

The NCCP (National Carp Control Plan) held a public meeting at Penrith Panthers Club on 23rd November 2017, 6pm to 8pm. Norm Halliwell, author and expert in his field attended this meeting and the following is his report.

Meeting open late at 6:20pm instead of 6:00pm. About 25 people attended including myself, Rob Minnet from the Koi Society of NSW.

The main discussion was from Matt Barwick, national co-ordinator of NCCP which lasted about 30 minutes, where he outlined what the NCCP were proposing to do with the release of the Carp virus (CY-HV3) into the Murray-Darling river system and its tributaries, as well as impoundments all around Australia.

Once the Carp virus is released the NCCP through Matt Barwick et al certainly have an enormous task on their collective hands to remove all carp from our waterways to say the least. NCCP are holding 82 events all around Australia and in most states of Australia in order to inform as many people as possible as to what they will be trying to do with releasing this highly virulent and pathogenic virus to our waterways.

They intend to form a cost/benefit analysis of whether they go ahead with this process, and (to my way of thinking they will find a way of doing this). In the 1920's NCCP stated that in one hour fishing around Echuca in Victoria a fisherman would catch 18/20 kilos of native fish. One cannot this amount of native fish in a whole week's fishing in the same place right now due to the presence of carp. A sad state of affairs I must admit.

NCCP stated that this virus will not replicate in any other species of fish other than carp, so there is no cause for concern for other native and non-native species (Trout etc). This virus is a Herpes virus that has a single host species and they are Carp (cyprinus carpio) which unfortunately is also the same genus and species for our common Koi species.

We were shown photos off how damaging the rabbit populations have caused to our environment before the release of Myxomatosis virus and then the Calici virus to control their

populations. These two viruses have shrunk the rabbit population by 98%, from 10 billion rabbits to around 100 million today. In 1929 rabbit hunting was a single largest employer of people, but they got behind the removal of rabbits and their homes due to the recognised damage they were doing.

NCCP definitely need to know how many tonnes of carp will they be dealing with, and what damage will be done if release of this virus is approved, so will need to be able to predict the outcomes of their collective actions through some sophisticated computer modelling by some of the best people from various Universities around Australia as well as choosing the best methods for clean-up techniques based on overseas experiences.

NCCP will want to know "is the virus release viable" and "if so, how to go forward with this release, and when". NCCP will want to know "what will happen to water quality if this very virulent and pathogenic virus is released"

Once the Carp virus is released, and the dead and moribund carp are removed from where the NCCP are working, a restocking program would possibly be undertaken to replace these waterways with native species eg, Cod, Perch and Bass to name a few into those places, to replenish those areas with native species.

At the beginning of these discussions Mr Barwick "hailed his colours to the mast". By saying from 5 years of age he hated carp and wanted to make it his long-term goal to clean out carp from the waterways. So, you can see where he is coming from right now!! Presently Carp are represented in over one billion square kilometres of Australian waterways and NCCP say carp represent 80-93% of the biomass of most waterways where they are present. I myself, feel these figures are a little over-inflated to say the least!!

The Carp virus is already in Australia otherwise they would not have been able to carry out the enormous test work they have done, on this highly pathogenic virus, and it is situated in CSIRO laboratories in Geelong, Victoria, where Ebola, HIV and other very virulent viruses are currently being kept. I asked this question so as to ascertain if it was being held securely and no accidental release could occur, like it did with the Avian Flu and the Calici virus that were prematurely released from supposedly secure premises in the past.

It was stated that the NCCP was a process, and not yet a foregone conclusion. It was also stated that the NCCP did not have:

1. The funds to release this virus yet
2. Do not have the funds to arrange for the clean-up of tonnes and tonnes of carp that this virus will create
3. Do not have approval to do this as yet

The NCCP have been given a \$15 million grant in May 2016 to do the necessary research to determine if this virus will be released. The decision on this process will probably come into effect by December 2018.

It was stated by the NCCP that the carp virus is most effective against carp at the optimum concentration between 15-28 degrees Celsius which causes 100% mortality in lab tests and at lower and higher temperature levels the mortality is a great deal lower (64%). When NCCP injected carp with the virus, all carp died at day 6, and when NCCP bathed carp in water with the virus 97% of carp died at day 8. However, it was pointed out that in the confines of a laboratory this will give a false reading, as a number will survive, and those that do will become "carriers" of this virus to which NCCP reluctantly agree this may happen. In such instances NCCP stated heavier doses of the carp virus would need to be carried out to cause heavier than normal mortalities, just like it did