

# **BIRD-KEEPERS GO ON HOLIDAYS TOO, YOU KNOW**

**OR .....**

## **THE EVOLUTION OF AN AUTOMATIC WATERING SYSTEM**

By Ian McArthur

In my retirement, the things that most occupy my time are being part of my grandchildren's growing up, travel and bird-keeping. Now at first glance these are nothing out of the ordinary for people in my position but they do present some problems since the first two are at odds with the hobby of aviculture. However, if you know that half of my grandchildren live outside of my home town, I am away from home every six to eight weeks or so. These stints away can range from the weekend in Adelaide, to a few days in the caravan to up to six weeks on longer trips.

Being away so often does have some significance for bird-keeping. To begin with, it does restrict the species which can be kept. I keep the hardier species which can survive without any undue stress without live and/or wet food on a daily basis. It also means that I need to be satisfied with breeding fewer birds than otherwise might be the case. Consequently, I look upon myself as a bird-keeper rather than a bird breeder. I get ample pleasure from the sights and sounds of my birds as I move around the backyard each day. Now don't get me wrong; I try to provide the best conditions possible so that my birds will breed, but I am satisfied with less than outstanding results.

Because I am not in the fortunate position of having an experienced bird-keeper to look after my birds while I am away, I keep those birds which seem to cope quite adequately on a diet of dry seed for a few days. I simply load up my seed containers and leave them to it.

Water, however, presents a different problem. Any article you read on keeping birds invariably states the obvious, which is that the birds must have access to fresh, clean water at all times.

Several years ago I read a description in an edition of BKIA about a watering system which consisted of trays set up with water continually dripping into them 24 hours a day) with the overflow being directed out on to trees near the aviaries. The theory was that with water slowly flowing

through the system all the time the rubbish which invariably gets into watering dishes and troughs would mostly be washed out. My first 'automatic' watering system modelled this, and my birds survived quite well with water which was of good drinkable quality. However, even all those years ago, this seemed to me to be waste of water.

I was on the verge of overcoming this water wastage by installing an electrical system using 240 volt power and all the expensive solenoids, etc, when much to my delight, I came across a battery powered unit which could be fitted directly on to the tap and set to operate for short periods of time (5 mins to 72 hours) at set intervals (6 hours to weekly). At the time I purchased this piece of equipment it cost me in excess of \$100, but it was ideal for my purpose, simple to operate with no costly installation. At this stage I used black plastic pipe and all the fittings as used in garden watering systems and available quite cheaply from any garden or hardware shop. I used 13mm pipe to run the water to my aviaries and then 4mm tubing from these into the aviaries fitted with an adjustable dripper on the end which then dripped into the troughs which I had fitted into the aviaries.

This system operated reasonably successfully for several years but I was still not completely happy with it because:-

- my technical skills were not all that great and I had trouble with water overflowing into the aviary. This led to some quite muddy floors in my aviaries, particularly when I was away for a week or two.
- the drippers were prone to blocking up even though I had a filter fitted to the system. This meant that the person I had looking after the place while I was away had to be alive to the possibility of the birds not having any water and filling up the water dishes, usually by hose squirted through the wire.
- when the drippers became blocked the 4mm tubing quite often 'popped off' the 13mm pipe also leaving the birds without water and on occasions with flooded aviaries.

The next advance came when I went on some aviary visits in the Barossa. One of the aviaries we visited was a substantial complex. Over a cup of tea and in discussion with the owner, I discovered that his aviaries were built on a bed of gravel which was 12cm to 15cm deep. He claimed that this did two things. Mice do not like digging through gravel so this problem was minimised. Secondly, the gravel gave a good bed for drainage. The gravel was covered with a layer of shell grit or sand which could be cleaned up as required.

Now my aviaries have paved or concreted floors so I decided to take the idea of drainage and mice prevention and apply it to my watering system. In each aviary I removed a few pavers and dug a hole about 15cm deep and half a metre square. This was the back filled with gravel. I used 12mm (half inch) gravel. I placed two such watering beds in each aviary. I then removed the drippers from the end of the 4mm tubing which ran the water into each dish. I use a large flat dish for the water. When set up in this way, I find that if the tubing is placed close to the bottom of the dish, when running, the water flushes most of the 'rubbish' out leaving fresh clean water for the birds. The water which overflows from the dish filters down through the gravel bed preventing any flooding of the aviary and keeping wet patches to an acceptable level. Not using drippers means that there is far less likelihood of the system blocking up, but if it does I now have two watering points so that if one does malfunction, the other will still operate and provide water for the birds. In the two years or so I have been operating in this way I have never had a blockage or pipe 'blow off' the system.

Battery operated units have also improved since the first one that I bought and have become much cheaper. Those which I currently use have two dials – one to set the period of watering and the other the interval between waterings. These allow for periods of 1 minute to 2 hours at intervals of 1 hour to a week. I usually set the equipment to operate for 3 minutes every 6 hours, a little longer and more frequently if I am away during hot weather. The units are also much cheaper; they usually sell for about \$40 but I have seen them for \$30 on special. These later units also use AA batteries as against the 9v required for the earlier model.

One last word of warning. After a near disaster on one trip away when the batteries went flat, I now use new batteries each time. Believe me the few dollars for batteries are worth it.

I am now able to leave my birds at almost any time of the year knowing that the watering system is as fool-proof as I can make it.