Stirling graduates in business

Number 5. Stuart Cannon MSc 1974-82 (part-time), by Janet H Brown

The "Stirling graduates in business" featured so far in this series have mostly all been chosen from amongst former students I have actually taught or those I have worked with through shellfish. In this, the 40th Anniversary year of the University of Stirling, it seems appropriate to spread my net wider and interview a graduate from the very early days of the Institute who has made a real success of fish farming in many spheres, Stuart Cannon of Kames Fish Farm.

Researching before meeting Stuart I saw that Kames Fish Farm was set up in 1972. That is exactly the year when the Institute of Aquaculture was first set up so I had a clue that there could be connections. But the connections were certainly not coincidental.

Stuart Cannon comes from a family farming background in north Lincolnshire and did an HND course at the renowned agricultural college of Harper Adams in Shropshire. He felt then that the returns from the fledgling fish farming industry looked more promising than the potential from conventional agriculture.

He was also attracted to the excitement of the new and challenging.

His first interest was in rainbow trout so he got a summer job with Graeme Gordon, already established as trout farmer in Dumfries (and later long time member of the Institute of Aquaculture Advisory Board). Graeme was already in touch with a Dr Ron Roberts at Glasgow University and was telling him that these newly established trout farmers were needing training in disease management. So with the setting up of the Institute of Aquatic Pathobiology in Stirling under Ron Roberts a very early activity was running such a course - the first of what became an annual fish disease course for the industry still running to this day. Stuart was one of the students and there met with Tony Dalton who then became his partner in setting up Kames Fish Farm. The only other shareholders in the venture were members of the Gully family who owned the land and took a keen interest in the new activity of fish farming. Sandy Bulloch and Sandy Shorthouse, who had recently taken on the Howietown fish farm which Stirling took over not very long after, were also founder members of Kames Fish Farm.

Stuart's background in agriculture has been a very strong influence in his considerable success as fish farming entrepreneur. His first venture was to grow rainbow trout in sea water at Kames but an early problem was that once the fish matured they were of no commercial value. How to prevent this? Stuart's pragmatic agriculture background suggested castration was the answer and with the connection with Ron Roberts remaining strong they looked at ways to "castrate" the fish as would be done on conventional livestock farms. Stuart enrolled as a part time student to do an MSc by research; the initial requirement for which was to follow a course in physiology in Stirling to make good the gaps from his agricultural background. Thus Stuart became the first part time student, the first MSc by research student and possibly a very advanced forerunner for our current CPD training possibilities. His work was done on Tuesdays and Wednesdays and he shared office space with Lydia Brown (PhD 1983) and Carmelo Agius (PhD 1980). This work led the way to production of all female trout using male hormones to produce all male trout and then breeding from these to produce all female trout. Later developments include production of triploid trout, both of which forms Stuart still farms.

One problem solved; but the next thing was that Kames was running out of space. They had a tiny hatchery but no water. All publications of that time (1976-77) said that salmonids had to be grown in sea water but Stuart, thinking out of the box as a good entrepreneur, wondered "what if we put cages in freshwater?" Despite advice to the contrary he went ahead and set a trial putting 500 fish in a cage in a mountain loch – and found they survived and thrived. This then became the beginning of growing salmonids in "still" freshwater. The increased disease and parasite threat that was feared never materialised but this could as well be down to Stuart's agricultural background where the idea of fallowing and not over stocking was in his blood. Although growth of algae was noted after a few years……Stuart claims this helped establish environmental work in Stirling! He still produces smolts at 3 freshwater sites and has also acquired sites on Loch Awe, Loch Tay and Loch Lochy but on these sites there is some water movement with wind action.

With the success of his moving into freshwater so enquiries started flooding in about cages from places such as DAFS and the Guinness Research Trust of Ireland and this is where Stuart's entrepreneurial skills really become

apparent. If people want cages, then they can have cages- so he started manufacturing them, forming a whole new industry. Kames fish cages are undoubtedly known the world over. One only has to do a cursory check on the internet to find many references to them. The cage business has led in all sorts of directions, recent work has included constructing tern rafts and swan rafts for wild life sanctuaries and gangways for marinas, e.g. on Kielder Water.

So with the know-how from salmonids, the cages to sell, the obvious next step was to sell the expertise. With a growing staff by this stage he had a lot of expertise to call on. One of his most successful projects at this time (1977-80) was setting up a farm to produce mirror carp in Lake Habbaniya in Iraq. The first manager on this project was David Scott, subject of my first "Stirling graduate in business" (Aquaculture News 2000).

Meanwhile back in Kames the straightforward fish farming continued, but not so straightforwardly. It was becoming apparent that rainbow trout were not so happy in full strength sea water and so were transferred to Loch Etive with its lower salinity conditions, while salmon farming was established at Kames and other sites on Loch Melfort. This was in the early 80s in partnership with a shipyard owner from Glasgow, Mr Connell. Between 1984 and 1998 they were producing 1500-1700 tonnes of salmon from 5 sites. While furunculosis and sea lice were growing problems these were the boom years for salmon but then catastrophe struck in 1998 with infectious salmon anaemia (ISA). All Stuart's stocks were culled because a contiguous farm which incidentally also had siblings of his current stock was infected. No compensation was payable so it was a financial disaster. It looked like it would be the end for Kames Fish Farming and almost literally, since at this time Stuart was also diagnosed with cancer involving surgery, radiotherapy and chemotherapy. A very bad year all round – but somehow Stuart seems to have picked up after such a major set back. Four out of his 8 marine sites had to be sold to avoid bankruptcy, but the enthusiasm for creating new ventures seemed to have survived the major set backs; so they continued producing the salmon smolts and went into halibut farming. In fact their first batch of halibut were also lost to ISA but since then they have produced between 100-200 tonnes per annum. But even in this venture which in itself was uncertain in its outcome, there was the major problem of the release of all his stock by animal liberationists in 2006. This was another disaster that also engendered enormous media cover but while at least there was some help from insurance the losses were major.

While these activities in "straightforward" fish production were going on in Scotland activities overseas continued. Extending fish farming development to Greece, in 1984 Stuart went into partnership with John Stephanis and set up a company, Selonda producing sea bass and sea bream. This was eventually floated on the Greek stock exchange in 1988 and Stuart's shares were bought out but he set up a new farm off the island of Evia. These two companies are not unknown to Stirling graduates, 2 MSc students were doing project work at Selonda only last year under the aegis of Phil Boddington (MSc 86-87).

Another development with long reaching consequences was the establishment of the cooperative Scot Trout with 5 other trout farmers including his early mentor, Graeme Gordon. This eventually became an organisation with 13 members and Stuart as the first chairman for 12 years. Scot Trout has recently been sold to Dawnfresh which means they now have almost total coverage of the UK supermarkets for their trout.

And Stuart has not shunned shellfish either. He had interests farming mussels in Loch Etive and also was involved with a mussel farming firm in the USA selling rafts to them on the basis that the Americans were not able to produce rotational moulded floats. A lot of Stuart's work on developing such technology was done with Jim McLaughlin of Xplora who clearly shared his get up and go philosophy.

In these interviews I always ask what the "Stirling graduate in business" most benefited from the MSc course. Since Stuart's academic path was not via the taught MSc this was not a question I could pose this time but throughout the interview Stuart stressed the importance of the role the Institute had played. In those early days nobody could know how best to do things and Stuart clearly welcomed the view of Prof Roberts; that diseases were challenges rather than problems. And this view of rising to such challenges, whether in dealing with parasites, finding new cage designs, new business solutions was something that Stuart felt strongly universities should provide and that the Institute was so doing. Stuart talked of a "volcano of enthusiasm issuing from the Institute" and felt the Institute could take a lot of credit for breeding this thirst for knowledge. It has been vital for building his business but clearly he can take real pride in his own achievement of being probably the largest independent fish farmer in Scotland as well as in his many other commercial achievements. And probably best of all, still maintaining huge enthusiasm for all these ventures. These articles are about Stirling graduates. Stuart made it very clear that his success was very largely supported by a graduate of another university, but anyone listening to the "On Your Farm" programme recently broadcast on BBC Radio 4 (20th January 2008) would have got the clearest impression that Stuart's wife Shelagh was an integral part of the business and vital to his success and continuing enthusiasm.

Seafish-funded project on the Solway Firth

Seafish are currently funding research on the Solway oyster farm of Mr Wilf Morgan, Solway Marine Oysters, to be carried out by Dr Janet Brown. Solway Marine Oysters have introduced a system of oyster culture little used in the United Kingdom, the Australian suspended culture system (BST system), which is untested in such a high energy situation as found on the Solway Firth. Over this winter the road to the beach and the sea wall have been partially washed away but so far the oyster lines remain in place! The project will investigate the performance of the system over three years and monitor any impacts of the activity on the immediate area. The Solway is an area marked for the development of shellfish culture but being an area of high importance from a conservation viewpoint it is important that these developments are monitored.