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SURSA
University of Stirling
Stirling
FK9 4LA

info@sursa.org.uk
www.sursa.org.uk

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Oral History

Interviewee: Kim Jauncey
UoS Dates: 1979 - 2014
Role(s): Senior Lecturer, Institute of Aquaculture
Vice Dean, Teaching, Faculty of Natural Sciences



Interview summary:

Summary of content; with time (min:secs)

00.00 Christina Sommerville (CS) interviews Kim Jauncey (KJ) who came to Stirling in 1979 as it was one of the two places in the UK working on fish, the other being Aston where KJ had been doing a PhD. It was a case studentship with the then Central Electricity Generating Board, looking at the growth and nutrition of carbon heated effluents, warm water fish in recirculation systems, growth, nutritional parameters in general. KJ was aware of the Unit of Aquatic Pathobiology and had met staff from Stirling at UK meetings. He was nearing the end of his PhD in 1978 when he saw 3 posts advertised at the institute. These were ODA funded in the Tilapia Project. Brendan McAndrew took up the post in genetics, Don McIntosh the post looking at sex reversal and KJ the post in nutrition of tilapia, which fitted with the work he had been doing. After his interview with James Muir and Ron Roberts, he was offered the post to start in April 1979, provided he had submitted his PhD and completed his viva. He and Don McIntosh started on the same day.

02.50 KJ was impressed by work going on in the Institute, very similar to Aston at the time. They were building recirculation systems and thinking about various scientific disciplines that were going to underpin aquaculture as it grew and the need to research in those areas. He was aware of Ron Roberts as his book with Jonathon Shepherd on fish diseases had been his bible when doing his PhD as carp get sick all the time and the book helped him keep them alive. Moving from carp to tilapia worked as a similar species and ecological function to common carp in tropical ecosystems. All three posts were short term post-doc contracts. KJ spent about 10 years on such contracts, mostly funded by the ODA. His remit in the first project was to establish basic nutritional requirements for tilapia, protein energy requirements and essential amino acid requirements since nothing was known about them. KJ didn't really succeed on the amino acids part as it is very difficult to discern the requirements with any precision. He did publish some results but most of his research career has related to looking at the development of practical feeds for tilapia. So, in tropical, especially developing countries, he looked at the ability to rear tilapia using locally available resources and being self-sufficient and independent as far as possible, trying not to use imported materials. He was interested in pond ecology and fertilisation and natural feeding and how that supports growth of tilapia. It was an interesting time to come to Stirling as scientifically underpinned commercial aquaculture only started in the early 1970s. The first salmon farm in Scotland was around 1971. KJ came to Stirling in 1979 at a time when the industry was picking up globally as well as in Scotland. The Unit of Aquatic Pathology and the Institute of Aquaculture grew up alongside the global industry.

06.30 KJ came as the first nutritionist but there was already a nutrition PhD student from Ghana, Henry Appler. He was a charming character who complained constantly about effects of the weather on his arthritic knees. KJ took over his supervision from Hadrian Stirling and James Muir and that was very good experience with a good student. KJ also took over some nutrition teaching on the Master Programme from Hadrian Stirling and developed the nutrition

programme for the master's course. Then in 1981 the Institute of Aquaculture was formed and KJ was at the opening lunch in Pathfoot, sitting next to Sir William Lithgow who was very entertaining and spoke of his life on the West Coast and his interests in salmon farming and passion for salmon. It was a large and lively event, with fine wines, in Pathfoot building in the room which had been the Library.

08.36 KJ then explains how the nutrition group expanded. A major advantage of Stirling at that time was the multidisciplinary nature of the aquaculture group and how things interrelated. When his fish got diseases from environmental challenges he valued collaboration with Brendan and the genetics group who bred fish and with Don whose research was on sex reversal of fish. Like all activities of the Institute, the Nutrition Group grew, for example, with Professor Matty who joined them when they became the unit of Aquaculture Nutrition. Other people followed from Aston, not only Alan Matty but also Albert Tacon and Nial Bromich. KJ enjoyed past friends joining him at Stirling. Then the unit of marine biochemistry, NERC funded, which had been part of the fisheries labs in Aberdeen relocated initially to the biology department and then to Aquaculture. This resulted in a huge expansion of the group and the range of things they could do. CS asks when the division of the Institute into named units took place. KJ explains that Dennis Hall from the ODA was asked to come and do an organisational review because the Institute was growing and he suggested the division into named, more focused research activities. KJ was not sure the end result was necessarily the most desirable outcome. The specific disciplines were separated into autonomous groups which changed names over the years, although the Unit of Aquaculture Nutrition stayed that. The Systems Group, the Diseases Group and the Genetics Group came into being and the structures became more complicated. KJ felt the main value of the Institute was its interdisciplinarity and even although the division was done gently in terms of providing named research foci, it's not really the way to encourage further collaboration between groups, clearly all related. You can't separate nutrition from general physiology of the animals, which is influenced heavily by the environment. You can't separate nutrition from disease as all animals with poor nutrition are likely to be more susceptible to disease. Division didn't stop collaboration but didn't make it easier or encourage it. KJ says the main general nutrition laboratory was and remains the main chemistry lab for the department which meant anybody wanting to do chemistry used these labs and that is the way to operate with some flexibility. One of KJ's strongest feelings about his overall time at the university was that when he arrived there was complete trust in his academic judgement and professionalism. He was given a budget, asked to write a course and take over student supervision, without oversight. Not long after he arrived they got a grant from the ODA to spend £300,000 on nutrition equipment, buying expensive kit. He did that without oversight, bought the best equipment and what was needed. By the time he left, he had to provide written justification to his Head of Department to spend even £100, even if the budget was in his own research grant. He felt there was a complete lack of trust at university level, though not within the Institute. Similarly in teaching, where, when he started, he wrote a course, taught it and assessed it and decided all the elements of that process. By the time he left, you had to submit a curriculum for approval, work out the student effort hours in a structure and pattern that reflected the university's requirement for a course of that level and duration. All assessments had to be approved to assess the learning outcomes you decided were required for the course. KJ doesn't think the bureaucracy really improved the process.

15.25 CS asks KJ to talk about his huge involvement in teaching in the Institute. For the first 10 years his post was mainly research but as he enjoyed teaching he took on as much teaching on the MSc course as he could. He taught not only nutrition but also carp culture and, because of his background, tropical fish. When the undergraduate BSc in Aquaculture was approved in 1989, based on Biology with the final two years based on marine biology, KJ got a lectureship after 10 years of short-term contracts. KJ had mostly to deal with Don McCluskey who ran the marine biology programme at the time and the relationship was generally good. KJ recalls some friction as some parts of the biology department were suspicious of the Institute, as a post-graduate and research biology centre, moving in on what they regarded as their area of FTEs and area of expertise. Eventually, the undergraduate programme expanded to include an undergraduate programme in freshwater science alongside the aquaculture degree. Later, after considerable negotiation, the Institute took on the marine biology programme, so controlled three academic strands with modules in all semesters from semester one onwards. This enabled them to develop the programmes and engage students more. For example, many students who did the semester one Blue Planet module went on to aquatic degrees despite having been accepted to the university for other streams of biology. They realized this was their vocation. As things diversified KJ's teaching responsibilities increased and he taught on many of the modules. Many staff got involved as the undergraduate degrees expanded.

20.00 Later KJ took on the role of Vice Dean for Teaching and Learning in the Faculty. As far as his teaching and activity within the Institute was affected, this remit to Teaching and Learning was a fractional allocation of his time. The post gave him more of a role in university central committees involved with Teaching and Learning and he really enjoyed it because it gave him more understanding of university processes, committee structure and the way decisions are made. He felt that, at a more senior level, engaged in those committees, he developed a little more

sympathy for the experiences of those at the front end, delivering learning and understand more about how the system works. It was an enjoyable few years and interesting as it reflected the Institute's role in Biological Sciences in the university. Lindsay Ross was the Dean and KJ was the Vice-Dean for Learning and Teaching so two of the three significant posts in the Faculty were occupied by staff from Aquaculture. This reflected the role the Institute had assumed in the university at that time and gave more of a decision-making role.

21.40 CS comments that this role took KJ away from research just when the RAE was beginning to be a major subject. KJ certainly did and does feel that the university system does not necessarily recognise and reward the learning and teaching efforts of its staff as much as it rewards the research efforts of its staff. It is much more difficult to progress through the academic career structure if concentrating on learning and teaching as he ended up doing, but it is what he enjoyed doing as well as the research element. KJ continued to supervise PhD students, probably about 40 in the time he was at Stirling. Many were overseas students. The patterns changed with global economics and politics. In the late 1980s and early 1990s he recalls several charming Nigerians, one after the other, then a series of equally charming students from Bangladesh. He recalls his first PhD student, Henry Appler and another, Adel Solomon from Egypt who stands out for producing the biggest thesis the university had seen before strict word limits were introduced. The thesis was on many aspects of ascorbic acid nutrition of tilapia. He was a very enthusiastic student who also produced lots of papers and some good science.

24.21 KJ was involved in finding research projects for many PhD and Master students. He kept his research going through the desire to develop practical feeds based on locally available raw materials and to evaluate novel feed ingredients which might be in areas where tilapia were found but were currently underutilised. Examples were byproducts from oilseed production, cereal production and livestock production, even baking yeast from factories producing baking yeast. There was always something new for students to look at. Another change over time was the different species KJ was involved with. He came to Stirling to work on carp but quickly African catfish, prawns and shrimp, freshwater prawns and marine shrimp were added. He also worked on some cold-water species with the salmon and trout industry. They did some successful work for distillers in Menstrie, DCL, and salmon feed companies looking at using their byproducts in salmon feeds. They built a Trout Experimental Unit near the Pathfoot boiler house. KJ and Brendan McAndrew got the Glenochil detention centre inmates to build the fiberglass tanks and he and Brendan assembled the pipework. Working with the detention centre was quite useful, if its production team was given a model they could replicate, they were very good. Working with the prisoners at Saughton in Edinburgh was also very useful. Jim Hercus, from the prison, was instrumental in this. KJ visited the prison a few times and prisoners that were on day release came through to the university. A grant from the Rowntree Trust enabled the conversion of an old prison laundry into an aquarium facility which could produce the large volume of fingerlings essential for the university work.

29.13 KJ was involved in overseas projects from 1983 onwards, particularly in Zambia, from the mid-1980s to early 1990s. Firstly, he worked with the Zambia Sugar Corporation on intensive aquaculture and producing feeds using locally available raw materials based just outside Lusaka. The Zambian economy was a wreck, copper prices had gone down, meat was very expensive and part of the contract between the sugar plantation and the cane cutters was to feed them. They couldn't afford meat so decided to farm tilapia. The project was partly ODA funded, partly Tate and Lyle funded, since the sugar plantation was managed under a contract with Tate and Lyle Technical Services, who had some aquaculture tilapia farming activities already in Jamaica. The second project was in the northern province of Zambia where a Norwegian aid organization already had a presence and wanted to do fish farming and fisheries work there. KJ recalls a memorable overseas trip where he spent six weeks in the northern province, driving around with two Norwegians and two Zambians in land cruisers looking to identify projects in aquaculture and fisheries, sleeping in the vehicles most of the time. They were in the bush, with vehicles chained to a tree to stop people taking them. He recalls flights with the Red Locust Patrol when, near Lake Tanganyika, they needed to get to a fishing camp on the other side of the lake. A pilot they met in a bar flew them over, saving them hours of driving. It was exciting as the pilot was a maniac! One advantage of aquaculture is that, particularly in developing countries, it is often carried out in remote, rural areas away from centres of population. There are opportunities to see nature and wildlife in remote areas and the people who live and work there. KJ agrees with CS who remarks that making a contribution is very satisfying. KJ also travelled in Nigeria, North Africa and Egypt on project identification missions. In Egypt he got cholera, not an enjoyable story. He discovered that if you need medical facilities in an Islamic country, mosques are the place to go as they look after you. He doesn't think he'd have survived the trip without help from the local mosques.

33.15 KJ also travelled in Asia, in India, Bangladesh and Sri Lanka. The Institute had an ODA funded project to enhance aquaculture and fisheries teaching programmes at the University of Ruhuna in southern Sri Lanka. It was a delightful place to go. Although the work overlapped with the troubles and issues with Tamils in the north of the island, the south was generally a fairly safe area. KJ undertook a British Council funded lecture tour of India, lecturing

on fish nutrition. He travelled overland by train and coach, from what was then Bombay, down the west coast to Cochin and then back up from Madras through central India to Bombay. Subsequently, like others from the Institute, he worked at the Mangalore College of Fisheries on the development of their aquaculture and fisheries programmes. He recalls going swimming in the sea there with Don McIntosh and realizing it would be very difficult to get out again. However, they survived to tell the tale. He also travelled in Singapore, Malasia and Thailand. He had students in Indonesia and was also able to visit them on occasion, going to Semarang and Bogor. He also did a nutrition consultancy in the Philippines. One of the highlights of being in Stirling for KJ was the opportunity for international travel, associated with the feeling that he was actually trying to make a positive contribution to what was going on in those countries at the time. The other high point is working with the students, and that is why he got more into teaching. KJ enjoyed seeing students develop and change, get engaged with the subject and, for both undergraduate and Master students, see them moving on to the research phase. They then have the opportunity to get deeply into the subject. Watching them learn and become different people has been a privilege. CS remarks the research project can be more than research, it can be a development stage for the students, helping them to realise what they want to do in the future. KJ adds that for the students, being in a multidisciplinary community, there was the possibility to speak about other aspects of the biology of the animal they were working with, or the environmental requirements of the animal and its role in global aquaculture.


37.15 KJ felt the staff student relationships, generally and socially, were very good. He recalls the International Food Nights which were great fun and the mini-Olympics at the end of the MSc course, which were hilarious. CS and KJ recall the welly-throwing contests. Brendan McAndrew held the record for how high you could throw a welly up the Pathfoot boiler house chimney. There were 3-legged races around the outside of the Pathfoot building and relay races in the Loch. He recalls Don McIntosh swimming in the loch in one of the relay races and being shouted at by campus security. Eventually, partly because the university wasn't keen on these events being hosted on campus, they moved to barbecues off campus. Staff student cricket matches were also hysterical, especially since many staff weren't very competent at cricket and many students, especially the Americans, had no idea what cricket was. KJ recalls a professor from Idaho, a parasitologist, on sabbatical, who wandered around the Institute wearing a hat with a salmon on it. When he played the first time, he hit the ball, dropped the bat and ran like hell, clearly having misunderstood! John Ballarin, playing for the students, was a competent cricketer who hit the ball over the trees and over the main road outside the campus. There were many other social events and the attitude of staff in the Institute was very relaxed. There was an open-door policy and if students needed to talk, they tapped the door. There was little formality. It was a fairly intimate atmosphere, but became more difficult as the department grew. In the 1980s staff used to meet up for coffee, large groups met up for lunch. That changed as the Institute got bigger, but it was still very relaxed.

41.40 Asked for additional highlights, KJ mentions Princess Diana's visit. In advance, there was a rehearsal where everyone was told where to stand and KJ was not due to meet the Princess. However, just before her arrival one of her aids rearranged everyone and KJ ended up standing at the front and met the Princess, had a little chat with her and shook her hand. He still has the university's official photograph on the wall of his study. Another memory of the visit is Nial Bromich showing the Princess round the new Wolfson Unit and talking about the experience for the next couple of weeks. Previously, he had been so disappointed that Prince Charles was not making the visit, but the princess won him round. KJ also remembers the preparation of the director's toilet in case she required it and the security on campus at the time. Over the years the Institute was visited by notable people from UK politics and representatives from governments and fisheries departments around the world. It was very interesting being at the centre of what was clearly an international focus for aquaculture at the time. The Institute of Aquatic Pathobiology had become the Institute of Aquaculture, which fairly rapidly became known in aquaculture globally as just the Institute.

44.10 KJ retired in 2014 but continued as an external examiner for Swansea, and at Plymouth and at Falmouth for their MSc courses. He did this for around 5 years. After that point, many universities think that at five years beyond retirement, academic expertise might not be current. He also did foundation science examining at Falmouth Marine School for the University of Plymouth for some years and at Harper Adams Agricultural College. KJ continued to supervise lots of PhD students, Europeans in the Netherlands and Norway, but mainly in the UK. He also supervised PhD students by correspondence in Australia, Malaysia and South Africa. KJ has also continued an engagement with the Aquaculture Stewardship Council, an NGO set up as an offshoot by the World Wildlife Fund to act as an eco label for responsible aquaculture. The first label was launched in 2012 and from 2013 onwards KJ has been involved in training auditors to audit the eco label. That has taken him all over the world, to Serbia, Japan and China, for example. The auditor training has been very interesting and KJ now continues to review the audit reports on behalf of the ASC, representing the ASC as a stakeholder in the eco label. Occasionally, he takes on other projects, not all related to nutrition. Recently, he looked into the use of chemicals like chlorine and iodine and other reagents in

aquaculture. He revised the shrimp standard for them and the current version of the standard is the one he produced. It all logically follows on from the way his aquaculture research career developed, since it's all about the steps to sustainability and sustainable aquaculture. He considers the eco labels in general have a positive impact on the responsibility of the industry and, therefore, the sustainability of the industry. Obviously, it all depends on funding and when an eco label starts, it gets things wrong because it hasn't got the staff or money. Once it is established and gets income from those licensing the label, the organization grows and has the resources to do things properly. CS asks how long this system has been going. KJ explains that the first salmon agriculture dialogues go back to the early 2000s when the World Wildlife Fund, or World Wide Fund for Nature as it is now, started talking of this. It had already established the Marine Stewardship Council to look after wild seafood products. It was a logical extension of that successful activity to establish an aquaculture version. They realized that different species were going to require different farm standards. It all came to fruition in 2011-2012 when the ASC was formally constituted and received its initial startup funding. It has blossomed, reflecting the way global aquaculture has gone.

49.48 Asked to add any final remarks, KJ says that in preparing for the interview and reflecting on his academic career, he realised how fortunate he has been. He has worked with amazing people, had incredible opportunities and there is no doubt in his mind that, when he came to Stirling, it was exactly the right thing to do. He was in the right place at the right time.

Interview No:	SURSA OH /	<p style="text-align: center;"> SURSA University of Stirling Stirling FK9 4LA </p> <p style="text-align: center;"> info@sursa.org.uk www.sursa.org.uk </p>	
Interviewed by:	Christina Sommerville		
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