

Interviewee: Ian Macrae  
Dates: 1971 – 1995 (UoS)  
Role(s): Founder member, Unit of Aquatic Pathobiology  
Chief Technician, Institute of Aquaculture  
Technical specialist, AAHRI, Bangkok  
Lecturer, Edinburgh Napier



## Interview summary:

### *Summary of content; with time (min:secs)*

**00.00** Christina Sommerville (CS) interviews Ian Macrae who was a founder member of the Unit of Aquatic Pathology, Pathobiology, which became the Institute of Aquaculture. CS asks Ian Macrae (IM) what brought him to Stirling in 1971. Ian had worked as a technician for 6 years at Glasgow Vet School since leaving school at 15. Towards end of that time there were salmon diseases and fish were brought to the vet school for diagnosis. An academic, Ron Roberts (RR), applied for funding from the Nuffield Foundation but Glasgow University decided against involvement. Stirling University was interested and put in some funding which allowed the foundation of the Unit of Pathobiology. RR offered IM a position which he took up. He had studied for an Associateship in Biomedical Science but had recently had a promotion denied at Glasgow. Initially, due to waiting for accommodation for the unit at Stirling, the research took place in the dermatology department of Glasgow University in an old part of the Western Infirmary. During that time IM and Adam Wilson, another appointment, ordered equipment to get ready for the move to Stirling. They travelled back and forth to Stirling. IM was grateful to the University for finding housing for himself and his young family in Stirling after the move.

**04.17** During the time in Glasgow Randolph Richards arrived to work in the dermatology and eye department. He'd returned from a trip to the Amazon, was interested in fish and had been in contact with RR. Randolph Richards joined the team at Stirling a bit late due to resits in Cambridge. The Unit was accommodated in the Terrapin Buildings, prefabs. They were in a lovely position, next to the old greenhouses, over the wall from the nursery. It was called Wall St. It was a lovely setting near Logie Kirk and Garden Cottage where the university had first started. IM didn't find setting up a research unit in these buildings challenging as he enjoyed organization and logistics. It was stimulating to be able to outfit, equip, purchase equipment for histology, microbiology, parasitology. Laboratory facilities were poor, the post-mortem room was in the toilet. Soon got microtomes and microscopes. Nuffield funding was generous. CS remarks that histology was the main tool then, microscopy. IM agree that they were basically the techniques that existed a hundred years previously. In those days it was plating out, isolation and identification.

**08.50** After the Unit moved to its new accommodation, probably in 1972, it was basically just constant development and improvement. As soon as they had the equipment, they undertook diagnostic work and had a system for booking in material that was either research or diagnostic. Farmers quickly realised they could

get assistance from the Unit of Aquatic Pathobiology. CS wonders how farmers found out about the unit as there wasn't much farming at the time, mainly trout farming. IM not sure, but some were ex-military, funded by their gratuities from the army. IM recalls some interesting characters and incidents. IM agrees with CS that these were pioneers and mentions some with clever ideas for solving problems. IM often went out to farms, to pick up diseased fish for processing. In the Unit then, there were Ron, Ian and Adam and the secretary, Elsie Kirk. There was briefly a research assistant, who left, and then PhD students arrived, such as CS herself, and Jim Buchanan and Hugh Ferguson who came in September 1972. There was some teaching, in the Terrapin Building. CS recalls a course for fish farmers, for the pioneers. It was a brief introduction to fish diseases.

**13.20** CS recalls a Masters course started at that point. IM wonders how they delivered courses in such limited space and CS recalls a room in the Terrapin Building was used. IM remembers the mature student Jim Buchanan because of his background in steel manufacturing and work in the Carron Ironworks. Both IM and CS remember a very wealthy Masters student who wanted to buy airfields, but don't recall his name. IM recalls this student bought watches for some staff to commemorate winning a Queen's Award. CS recalls a Turkish couple, Metin and Goshir Timur. There were also German students, Karl Heinz Bognor. Another German student, whose name is not recalled, had previously work on rabies in Upper Volta and done research in South America. There were people from New Zealand, such as Colin Anderson. There was also Ian Anderson.

**17.30** CS asks about events of the time. IM recalls overseas work for the British Council and the ODA. When the Terrapin building could no longer contain the unit, they got more space in Pathfoot, in H Corridor, expanding later into K Corridor. IM spent time designing laboratory space and outfitting rooms, work he enjoyed. Facilities in Pathfoot were a big improvement, but the Unit began to rapidly outgrow that space. More teaching meant they needed more space and to improve facilities. Demand grew for teaching facilities, research facilities, diagnostic and fish-keeping facilities. CS recalls that soon after the move to Pathfoot, the Unit moved into the field of tropical aquaculture and wonders what challenges that brought. IM recalls that, before that, for cold water fish, there was a cold room in H Corridor, like a big walk-in fridge with tanks. The Unit then moved into the boiler house and had a lot of tanks built, glass tanks and fish-holding facilities. It was a difficult system and there were problems with Home Office inspectors, applying rules about how fish should be kept and facilities. CS remarks it must have been one of the few facilities of its kind in the country as no-one else was doing that type of research at the time. IM explains that the inspectors were applying regulations that applied to rats, mice and other animals to fish. He recalls arbitrary rules about covering tanks and ensuring fish on one diet could not see fish on a different diet. Dust was also an issue and IM recalls expenditure on rafters in the garage building near Pathfoot

**32.25** IM wasn't involved in the mass production of tropical fish for research. Eventually there were technical staff adept at looking after fish, aquarists. With the expansion, there was an increased number of technical staff, 26 at its peak. The core staff started out with people who had been on Youth Opportunity Schemes, like Willie Hamilton and Alan Porter. He recalls Betty Stenhouse and Billy Struthers who was in charge of stores. By that point managing the stores had become a major focus of activity. IM designed a data base to track expenditure which went against RR's ideas. However, when Finance checked things out, it was a system that worked well. It was challenging as some projects were funded by research grants and others by the University. IM often was arbiter. Projects had codes to attribute funding. CS points out that often research projects didn't include funding for technical support which had to be dispersed among the projects. IM recalls that getting the balance right was challenging. CS recalls that a 20% hike could be included in funding for technical support but doesn't know if that reached the team. IM recalls that as an issue and that granting bodies would not pay for consumables. This was even more of a problem abroad.

**27.00** IM visited a wonderful laboratory in Bangladesh funded by the Ford Foundation with very good equipment, some unused as they had no money for spare parts for repair. Likewise, IM found a lack of funding abroad for books and journals. A research institute in Vietnam could not subscribe to the Journal of Fish Biology as that was the sum of their total budget for the year. Consequently, they were not up to date in procedures. Many did not have computers or the internet at that time either. IM also recalls a British Council project in Egypt to look at a college in Idku with Alan Stewart. They were accommodated in a lovely hotel in Alexandria and travelled along the corniche every day past sites from the Napoleonic Wars, including Rosetta,

where the Rosetta Stone was found. IM recalls getting a lot of work done and finding time to explore the pyramids and see Tutankhamun's mask in the Museum of Cairo.

**30.50** CS and IM recall other projects abroad such as a workshop about tilapia in Sri Lanka where IM did a tour through Kandi and Udawalawe. A link with one of the universities on the east coast was cancelled due to troubles although CS had visited before the cancellation. They recall buying batik and that there were some pieces decorating walls in the Institute. A pivotal moment for IM and for the Institute was an FAO funded visit to the National Inland Fisheries Institute in Bangkok, Thailand. They were looking at catfish disease. Both CS and IM were involved in projects there and recall cheap flights in local airlines, poor accommodation, food poisoning due to the change in diet.

**36.00** IM describes the dramatic changes in technology in the university laboratories over the years. He was always an early adopter and recalls getting the first computers and stacks of discs. He also enjoyed training other staff. Computer aided counting was useful. Technicians were doing a lot of analysis. Billy Struthers took control of water analysis and Alan Porter did nutritional analysis. IM was interested in the histology laboratories as that was an area he had studied and had qualifications. He enjoyed microbiology. He recalls a visitor being impressed by the dichotomous key used for diagnosing Aeromonas diseases. CS recalls at that time there was quite a lot of diagnostic work, three diagnosticians, and the laboratories were supporting that as well as the research. IM had enjoyed diagnostic work in his earlier post in the vet school.


**37.40** IM recalls attending the opening ceremony at Machrihanish although he wasn't involved in the project. At the ceremony he met the Chief Scientific Officer, advisor to the government, called Stewart, who gave an amusing speech. He had a croft and was from the islands, Islay.

**40.00** IM was involved in the ODA funded development of laboratories in Thailand. Following on from the work on catfish, it was identified that facilities needed to be developed in Southeast Asia for the booming aquaculture industry. IM made annual visits to the National Fisheries Institute, part of the Department of Fisheries of Thailand. The ODA funded a project – The Southeast Asia Aquatic Disease Control Project – to which IM was seconded from 1990 for 10 years. This became the AAHRI, Aquatic Animal Health Research Institute. This was a major change in his job as IM left the Institute to take up the post, remaining on the university payroll for 5 years, then later was employed locally. He worked with many staff coming out to do workshops and train visiting people from Malaysia, Indonesia and elsewhere.

**42.00** CS invites IM to recall social events and people over his time at the Institute. There was a good social life. Charlie Howie and Charlie Hardaway – informally dubbed H & H Promotions – arranged events such as an Olympics at one point. From the original 3 staff, the numbers grew and many became friends and IM is still in touch with some today. The best times were working in Thailand and South East Asia which was very fulfilling and interesting. IM enjoyed travelling and the memorable visits, such as to Cambodia, Ankor Wat and the Plain of Jars in Laos. Vietnam was very interesting with lovely people.

**44.35** CS comments on how IM was the backbone of the Institute from the start, part of its core foundation, with a key role. IM says how honoured he felt to be awarded a Master of Arts Honorary degree by his peers in 1998. The degree also had a significant effect on his employment after he left the Institute. He recalls a sailing trip where he spent some time waiting in Whitehaven. He was unemployed at the time and, by chance, saw an advert from Napier University for a teaching associate to develop teaching materials and to be involved in overseas courses. A PhD was required, but IM phoned and spoke to a secretary as it was the summer and no-one was there. She encouraged him to apply anyway. At the interview the only other applicant hadn't prepared a presentation, whereas IM had a Powerpoint presentation plus details of his publications. He got the post which was later changed to a lectureship, as that was the job he was doing. IM retired, as he had aimed to do, once he had completed 50 years in employment, from the age of 15 to 65. Napier was an interesting change of job. At the interview he was told he'd be producing teaching material for Hong Kong and doing a little teaching. IM explained he hadn't done any formal teaching, only informal. Within a month, he was teaching 22 contact hours a week, with five-hour practical classes which he enjoyed. The teaching was challenging as he'd been used to post-graduates at the Institute whereas these were undergraduates. He was admissions tutor as well which he also found rewarding. CS closes by commenting on IM's very interesting career and thanks him for the interview.

Ends

<b>Interview No:</b>	SURSA OH / -	<p style="text-align: center;"><b>SURSA</b> University of Stirling Stirling FK9 4LA</p> <p style="text-align: center;"><a href="mailto:info@sursa.org.uk">info@sursa.org.uk</a> <a href="http://www.sursa.org.uk">www.sursa.org.uk</a></p>	<p style="text-align: center;"><b>SURSA</b></p>  <p style="text-align: center;">Oral History</p>
<b>Interviewed by:</b>	Christina Sommerville		
<b>Date of interview:</b>	27 <sup>th</sup> February 2024		
<b>Summary completed by:</b>	Moira Ball		
<b>Date:</b>	18 February 2025		