Pearl

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Department of Aquatic Biology & Fisheries

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NOSTALGIC MEMORIES OF MY LEARNING EXPERIENCE AT DEPT. OF AQUATIC BIOLOGY AND FISHERIES

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The memory of my first visit in my childhood to the Aquarium which was part of Department of Aquatic Biology and Fisheries, University of Kerala is still fresh in my memory. The sight of different varieties of coloured fishes swimming in the wall mounted aquaria was a fascinating experience for me. The wonders of aquatic life which I was able to observe closely in the aquaria has left an unforgettable impression in my mind and thereafter whenever I had visited shankhumukhum Beach during my childhood my main interest was to visit the aquarium.

Years passed and after completion of my post-graduation in Zoology from M.G. College, Trivandrum I wanted to join for M.Phil course. I had applied for M.Phil course in Zoology and then I came to know that an M.Phil programme is going to be started during the academic year in Aquatic Biology and Fisheries. I preferred to join that course even though my post-graduation was in Zoology. It was during 1975 and the Dept. of Aquatic Biolgy and Fisheries headed by Prof. N. Balakrishnan Nair was then at its peak of glory. I had met Prof. Nair before I had joined the course and at that time I was much attracted by his towering personality and deep knowledge in the subject. When I came to join the M.Phil course, Prof. Nair was somewhat surprised and he asked me why you have not joined the Zoology Dept. . I have told him about my interest in the subject of Aquatic Biology and Fisheries due to its applied nature. I felt that he was impressed by my answer and was happy to accept me as a student of the first M.Phil batch. In fact it was a turning point in my life. A few lectures given by Prof. Nair opened up the ocean of knowledge on aquatic ecology. The interactions with Dr. K.G. Padmanabhan who was then the curator of the aquarium gave me a wealth of information on fisheries. Prof. N. Krishna Pillai taught us the basics of taxonomy. I also remember the inspiring classes taken by Prof.

Sadasivan Pillai on marine chemistry which revealed me the complexity of sea water. The discussions with Prof. P.A. John gave me much insight into crustacean physiology. In addition, the discussions with post-doctoral fellows and research scholars of the dept. gave me immense grass root level knowledge on different researchable issues in the field of aquatic biology and fisheries.

I had to make special efforts to grasp the subject as I was basically a Zoology student. I found the subject quite interesting and each day in the Dept. was a new learning experience. I have gained basic knowledge on aquatic ecology, taxonomy of crustaceans, fishery biology and aquaculture.

My dissertation topic was on taxonomy and abundance of planktonic amphipods and my supervising teacher was Prof. N. Krishna Pillai. Prof. Pillai was an internationally acclaimed crustacean taxonomist and I was really afraid to go to him due to my ignorance on the subject. The first day when I went to him he gave me a plankton sample and asked me to isolate a few amphipods. I tried my best and isolated a few specimens and went to him. He examined the specimens and started laughing. Then he told that the specimens which I had isolated were copepods. He sorted out a few amphipods from plankton samples and showed me. He also remarked that my current level of knowledge on amphipods is evidently nil and from here I have to struggle hard to learn the amphipod taxonomy. He told me to start drawing diagrams of appendages of amphipods using camera lucida. It was a real struggle for me to learn drawing by using camera lucida. After a few days of struggle I was able to make a few drawings of amphipods. I went to Prof. Pillai with the drawings I had made. He looked at them and started laughing. He then tore all of them and put them in waste paper basket and remarked that it was a waste of time, energy and resources. I felt thoroughly dejected and disappointed. I was about to weep. He looked at my face and pacified me. Then he showed me some of the drawings he had made on parasitic copepods. I was taken aback after seeing the precision and quality of his drawings. Thereafter I have consulted Dr. Sasidharan who was working on the taxonomy of amphipods. He patiently taught me how to dissect and draw amphipod appendages. I struggled and struggled and started drawing with better precision.

The learning experience which I had during 1975 was so vast and I was transformed from a theoretician to an applied researcher. I had entered as a Zoology student who had practically no knowledge on fisheries but at the end of the course I was able to get selected as scientist in the Fishery Biology discipline of Agricultural Research Service (ARS) of ICAR.

I had successfully completed my M.Phil course and joined at the Central Marine Fisheries Research Institute (CMFRI) as a scientist. I wanted to complete my PhD work at the earliest opportunity. Getting the required study leave was very difficult and I was able to get the same only by 1995. Consequently I joined the Dept. of Aquatic Biology as a PhD scholar. By then the stalwarts of the dept. had retired. The Dept. was ably headed by Prof. P. Natarajan and the faculty consisted mainly of my contemporaries. I have registered under the guideship of Dr. V. Jayaprakas who was my batch mate during the M.Phil course. My area of research was on brackishwater rotifers as live feed for aquaculture. I felt very friendly to work under Dr.Jayaprakas and he gave me good suggestions and ideas. My PhD programme was very thrilling which exposed me to the vital area of live feed culture for larval rearing of marine

finfishes. I had completed my PhD works within two and a half years , submitted the thesis and joined back at Vizhinjam Research Centre of CMFRI.

After joining back the expertise I had gained in live feed research has helped me immensely in my research programmes on breeding and hatchery production of selected marine ornamental fishes and foodfishes. My team was able to develop technologies for breeding and seed production of a dozen species of marine ornamental fishes which are in very good demand in the international trade. The scaling up of these techniques can lead to the development of a hatchery produced marine ornamental fish trade in India.

Subsequently I was transferred to Mandapam Regional Centre of CMFRI where I am heading the Mariculture Division of the Institute and also functioning as the Scientist-in-Charge of the Centre. What I consider as the most significant achievement of my career was accomplished during this period. My team has successfully developed the technologies for breeding and seed production of two high value marine finfishes which have high potential for mariculture in India *viz.* cobia (*Rachycentron canadum*) and silver pompano(*Trachinotus blochii).* The seed production technologies are almost standardized and a few farming demonstrations were also done successfully. There is a lot of demand for farming of these two species by famers and entrepreneurs and in the immediate future it is anticipated that mariculture of these two species will gain momentum and make substantial contribution to the seafood production of our country. Looking back, I fee contented and happy. I attribute the major portion of the success of my career to the fruitful learning experience I had with the Dept. of Aquatic Biology and Fisheries.