

The following is an english transcript\* of Dr.Komei Koshihara's, President of Nagoya Women's College, radio broadcast to the whole Japanese nation over the NHK radio station, 9:15 p.m., May 25, 1966.

## THE STORY OF HANAKO

I was asked the other day to speak about a thing in which I am interested. I said in reply, "All right, then I shall speak about "koi"." The person, however, misunderstood me and said reprovingly, "No, no; I'm asking you in earnest. Interested in love! You're joking!" His words made me a little indignant and I said, What I call "koi" is not "love" in English, but carp, a kind of fish that is swimming in the pond. "Oh, I see; please speak about that." So it is that I have come to speak to you about the red carp which we keep at our house in Gifu, my native place. We lovingly call this carp "Hanako".

Well, we can see carp everywhere, but this red carp of ours, "Hanako", is as old as 215 years. You will be surprised to know how precious an existence she is. According to Mr. Masayuki Amano, who is a noted enthusiast about carp and was working at the Fisheries Experimental Station in the carp producing Niigata Prefecture, the carp is one of the most long-lived of all kinds of fish. He says he has seen some carp more than 100 years old, but none so old as exceeding 200 years, and one so old as 215 years, is precious beyond all measure, from the scientific point of view. I, for one, am wondering at the longevity this carp of ours is enjoying.

There did not exist in this world any such country as the United States of America yet at the time when this carp was born. It was 25 years later that America made public the Declaration of Independence in 1776. It is very interesting to think that during the long years that this carp has continued to live, a country by the name of the United States of America came into existence and has built up her present culture of high standard. To speak in Japanese fashion, it was born in the 1st year of Horeki, that is, in the middle of the Tokugawa Era. Please consider how long her life is, surviving the shogunate and later the national advancement of Meiji and Taisho, and still continuing to live to this day of Showa.

This "Hanako" is still in perfect condition and swimming about majestically in a quiet ravine descending Mt. Ontake in a short distance. She weighs 7.5 kilograms and is 70 centimeters in length. She and I are dearest friends. When I call her saying "Hanako! Hanako!" from the brink of the pond, she unhesitatingly comes

swimming to my feet. If I lightly pat her on the head, she looks quite delighted. Sometimes I go so far as to take her out of the water and embrace her. At one time a person watching asked me whether I was performing a trick with the carp. Although a fish, she seems to feel that she is dearly loved, and it appears that there is some communication of feeling between us. At present my greatest pleasure is to go to my native place two or three times a month and keep company with "Hanako".

I am often asked how it is that I can tell the age of a fish. As a tree trunk has its annual rings, so a fish has its annual rings on its scales, and we only have to count them to know the age of a fish. As a matter of course, we ourselves cannot do it. It requires the aid of a specialist and the use of a light microscope. Now, what was it that made me think of ascertaining the carp's age? My grandmother on maternal side, who left this world at the advanced age of 93 some eight years ago, is said to have been told by her mother-in-law, "When I was married into this family, my mother in-law said to me, "That carp has been handed down to us from olden times; you must take good care of it"." When I was told this story, I became very curious to know how long the carp had lived. I found out Hanako's age by the before mentioned method, but you may easily imagine how greatly I was grieved when I was forced to take a scale off her beautiful body. I caught her in a net very cautiously, and repeatedly said. "Excuse me!" I took off two scales from different parts of her body by using a strong tweezer. The scales were examined by Prof. Masayoshi Hiro, D.Sc., Laboratory of Domestic Science, Nagoya Women's College. It took two months for him to acquire a satisfactory result. By using the light microscope, he photographed every part of the scales. It seems he took a great deal of trouble. When it was certain beyond doubt that the carp was 215 years old, the two of us exchanged a look of delightful surprise.

Then I had the Professor examine the remaining five carp in the same pond, three white and two black ones. The examination took one year, and it was found out as the results that three were respectively 168, 153 and 149 years old, and the remaining two were both 139 years old. Those results led us to be convinced that not only are the carp rare ones but they are a very precious existence from the scientific point of view as well. We must consider, then, in what surroundings and under what conditions these long-lived carp are placed. The pond is located far deep among the mountains of Mino Province. The locality is called Oppara, Higashi-Shirakawa Village, Kamo County, and is about the same distance from Gero Hot Springs on the Takayama Line as from Nakatsugawa City on the Central Line, both lines belonging to the National Railways. Nearby there are rustic hot springs called Oppara-onsen. Facing south toward the Pacific on the top of Mt. Ontake, you will look down upon the locality at the foot of the mountain. Through the locality runs the Shirakawa, a tributary of the River Hida which again is the upper reaches of the River Kiso. A stream of limpid water never ceases to flow all the year round. It is this water that flows into the pond which "Hanako" lives and which was carefully constructed with stones in former days. Besides that, pure water trickled from the foot of the mountain streams close by

into the pond, making the favorable conditions still more favorable. The pond cannot be called large, only being about five meters square.

My family, of the name of Koshihara, had been the village head from generation to generation since the beginning of the Tokugawa shogunate up to the abolition of clans and establishment of prefectures in the Meiji era. Both the house and the pond are at their original places and have not changed in the least, which can be testified by the ancient documents handed down to this day.

Now, I should like to solicit you to pay kind attention to a short poem I wrote about the red carp "Hanako".

#### Poem about HANAKO, the Red Carp

There lives in our pond Hanako, a carp  
Longer than two hundred years and still.  
Still brightly aflame is Hanako, the red carp  
Put a swimming long ago in Horeki by our forefather.  
A bright day after rain, a killifish crosses the way  
Of the red carp coming toward me at my call.  
Hanako, Dear, thou eatest feed from my hand  
Then fondlingly suckest thou my empty fingers.  
The aged carp, knowing all the family history of ours,  
Deep under the limpid water has gone.

Here, turning from the longevity of the carp, I would like to refer to human expectancy of life. Needless to say, I am not in the medical line, I must request that you listen with an open mind.

The life length of all living things has been allotted by God, and humanity cannot do anything about it. Such large animals as cows and horses can live 30 to 40 years at the most, while so small an animal as a carp has a life span say 60 years, and very rarely he can live till he is one hundred years old. It is said that the life of all living things is sustained by lipid, nucleic acid and protein that are

contained in each of their cells. These are called under the generic name "essence of life." If so, I should think we should analyze the cells of a carp that can live so long, to know how much lipid, nucleic acid and protein, the essential components of the body, are contained in them and what property these essences have. Then we may probably be able to recompose the cells of the human body in the fashion of a carp's cells. When the research is completed, it will become possible for human beings to live as long as 200 years. This is the age in which man is not only trying to bring about a nuclear revolution by the development of atomic energy but aspiring to travel through the vast space by means of rockets. I should heartily desire that man should put an end to his crazy attempt to destroy humanity by atomic explosion and should devote himself to the revolutionary feat of extending human life, after the example of the First Emperor of the ancient Shin Dynasty, instead of being absorbed in the vain attempt to reach the moon.

It seems that the recent scientific method is to establish a hypothetical principle first and then proceed to demonstrate it with facts. I should favor, however, that methods of Edison, the king of invention who dreamed of the making of such and such and finally realized it on the basis of science. It would belong to the sphere of biochemistry, I think, to study the extension of human life on the grounds of reality that allows carp to live so long and I should expect the rising generation to tackle with this feat of feats.

Recently I told a certain scientist about this dream of mine and he praised me by saying "It is a wonderful idea, indeed, in this dreamless world of today." I was quite delighted to hear him say so, but I had a question I asked him to clarify. I asked, "If the components of the human body are successfully modified after the fashion of those of the carp body, will not the constitution and shape of the human body change into those of the carp body?" He immediately answered, "You have no need to worry. Man's chromosome is quite different from that of the carp." Now let us do our utmost, with an easy mind in the attempt to prolong the life span of humanity.

Well, I shall now return to the keeping of carp, the subject I am most interested in. My everyday duty detains me in Nagoya. My dwelling in that city has a room under whose floor comes in the water of the pond in the garden, about a quarter of the room space, so I live always in carp company. When I had this house of mine built, the part of the site which was to be the future pond was surrounded by walls concreted thicker than any other part, with the bottom also thickly concreted. Then I got that part connected with the garden pond outside. Over the indoor part of the pond crosspieces were laid to sustain a transparent piece of plate glass as thick and strong as to allow a person to walk upon it without any fear of breaking it. Upon this glass covering I take my meals and read books. At night the mottles of fancy carp, gold, silver, red and white, shine brilliantly under the light of electric lamps. I keep more than 100 carp in this pond, but the

monthly water service charge I pay does not exceed 800 yen. This is the result both of my care in using water and of my invention to remove automatically the dirt and filth that accumulate at the pond bottom. My invention is to make the pond bottom sloping, to fix a pipe perpendicular just above the lowest part of the bottom where dirt and filth accumulate, and to remove dirt and filth by force of hydraulic pressure. What is important is to make the water surface higher than the outlet mouth of the pipe which is placed outside the pond. Then we have no need to worry about the trouble of cleaning water nor to worry about carp disease and parasites through out the year. Making use of this pond, I make infant carp grow to more than 30 centimeters in several years.

Our urban life has become, and is increasingly, dreary owing to the soiled atmosphere and noise. What do you say to making your daily life somewhat more enjoyable by constructing a pond for fancy carp? It can be done with only a little spare time and small labor. I call fancy carp "Live Jewels", and I am convinced that they truly deserve the name. Thanks to their owner's loving care, the carp, male and female, grow larger and larger day by day. If you put your hand into the water they will gather around and suck the finger tips. It is to be sincerely desired that we all should have the spare time and self possession to stroke and pet these "live jewels" on the back from time to time. Thank you for your kind attention.

Thus ended my broadcast. For your information, I shall attach below the dates of birth and chronicles of the six carp that live in the pond of my native house in Gifu (The age is calculated from 1968).

1. Hanako (scarlet) - 217 years old; born in 1st year of Horeki (A.D. 1751); in the preceding year there arose an internal feud in the Kaga Clan; and the birth was 25 years before the Declaration of Independence of America.

2. Aoi (white with red spots on belly) - 170 years old; born in 10th year of Kansei (A.D. 1798); in the same year Norinaga Motoori published "Kojiki-dan", Juzo Kondo discovered Island of Etoroff, and Napoleon went on his Egyptian campaign.

3. Chikara (bluish black) - 155 years old; born in 10th year of Bunka (A.D. 1813); in the same year Kumpei Gamo died, Stevenson invented the steam engine, and in the following year Bakin takizawa published "Nanso Satomi Hakken-den".

4. Satoru (white with black spots on back) - 151 years old; born in 14th year of Bunka (A.D. 1917); in the same year an English ship visited the port of Uruga. Death of Gempaku Sugita.

5. Santa (black with an indented scar on the face) - 141 years old; born in the 10th year of Bunsei (A.D. 1827); in the same year Sanyo Rai published "Nihon Gaishi". Great Fire of Yedo in the following year.

6. Yuki (white) - 141 years old; born in the same year as "Santa".

As documented previously, Hanako was the oldest carp in the Japanese Islands. The name has been well known by the foreign fanciers and specialists as well as among the Japanese. It is regrettable to announce that Hanako died on July 17, 1977 (Showa 52), ending her life at age 226 years.

\* "LIVE JEWELS" General Survey of Fancy Carp, Masayaki Amano, Kajima Shoten Publishing Company, pg.199-205