# Omori Seaweed Museum English Translation

# Floor 1



#### 1-A - Seaweed placement

Winter mornings come early for seaweed growers, and by 2 a.m, the lights at the "Tsukeba" areturned on and work begins. The "Tsukeba" is a workroom that extends over a corner of the main building, where the "Noritsuke" (making of seaweed) was done before dawn. This is a reproduction of the room from1955. Outside the window, there is a water pipe that temporarily holds water drawn from a well. The water is then poured into a "dipping barrel" placed next to the dipping table to dissolve the chopped seaweed. On the "Tsukedai," there is a reed screen with a frame on it. The seaweed dissolved in water is poured into the frame with a "Tsukemasu" and attached to the reed screen.

#### 1-B - Drying Shed

When it rained, they used the stove inside the hut to dry the seaweed with its heat.

#### 1-C - "Bekabune" and "Chubeka"

The boat that is indispensable for picking seaweed is a small boat called "Bekabune " or"Nori-picking Tenma ". In a single-seater boat, they will go out with a colander to pick the seaweed. Back in the old days, they used to row this "Bekabune" to the seaweed farm, but asthe fishery expanded, seaweed pickers began to load it on a larger ship and pick them up. Before the widespread use of these large seaweed ships, a stable medium-sized boat called "Chubeka" was used as a carrier for aquaculture materials. The "Chubeka" on display was reconstructed in 1996 based on records that were left.

#### 1-C - Seaweed Ship

To row a small boat, the seaweed field is spread far offshore, and when they started to carry materials for seeding (spore seeding) to the coast of Chiba prefecture, they needed a big boat. It wasn't until the Showa era that it was built as a seaweed-only boat, starting with the use of used fishing boats in the Meiji era. It was a power ship called "Noribune" or "Oyabune", and the ship was equipped with an electric ignition engine called "Chaka". Especially after World War II, it was necessary for each house to carry the pillars of the seaweed net, and it is said that there were about 700 seaweed boats in Omori when seaweed farming was closed in 1963. This seaweed ship was built by Kifunebori shipbuilder "Funatake" (Mr. Kojima) at the request of Mr. Yasutarou Ito of Omori in 1958, and after the end of the seaweed fishing industry, Mr. Kaichirolto took over in 1965. It is a ship that has been used as a fishing boat. This is the last ship that still exists as an Omori seaweed ship.

#### 1-D - Flag Migration

In 1951, seaweed producers across the country established the Central Council for the Study of Shallow Sea Propagation to improve breeding techniques, and began labeling outstanding groups every year. In the spring of 1936, Tokyo's seaweed picking ended

its production, which had been going on since the Edo period, due to a large-scale renovation of Tokyo Port's shipping lanes and reclaimed wharves. At this time, the Tokyo Metropolitan Government's YouthNori Research Group, which had played a central role in the nation's seaweed production, was formed. At the flag presentation ceremony in May 1963, the Tokyo Metropolitan Government's Youth Nori Research Group said, "From today, we start a new life. At the flag presentation ceremony in May 1963, the representative of the competition, Mr. Go-Roku Ishii (from Haneda-Kaieikai), added the following words: "This flag is a flag of bountiful harvests, a flag of endless progress, a flag of remembrance for our departed". In June 2013, the Central Council renewed a second flag to replace the first one, and Ota Ward, which is associated with the seaweed fishery, kept the first flag, which was entrusted with the wishes of Tokyo's seaweed pickers, and introduced it to the public.

# Floor 2

# **1.Preparation throughout the summer to fall**



#### 1-A - "Fukkiri Hiroi" - Diorama

As bad weather disturbs the sea, a large amount of seaweed is cut away and washed away. Once the weather calms down, the deposited seaweed is picked by a net called "Tama-ami" in a practice called "Fukkiri Hiroi". The diorama shows this practice from the early days of the Showa period.

#### 1-B - Seaweed Stilts

These were worn by workers when placing seaweed collection sticks called "Hibi" in fisheries with water depths greater than their height. The stilts range in height from 30cm to 150cm andwould be used interchangeably, depending on height.

#### 1-C - Wooden Hibi

From the Edo period to the Taisho period, wooden sticks were bundled and placed in the sea to catch and grow seaweed. Wooden Hibi were made from branches of Zelkova (Keyaki) and Oak.

#### 1-D - Bamboo Hibi

From the Taisho period to 1945, in order to grow seaweed, bamboo branches were used and placed in the sea. From the middle of the Meiji period onwards, as the fishery rapidly expandedoffshore, bamboo branches were tied to rods to become 5-6 meters long. These "knotted Hibi" were then used more frequently.

#### 1-E - Swing Stick

A tool used for digging a hole to place the bamboo Hibi. Metal pieces are wrapped at the tip of the stick. Swing sticks used in deeper areas have longer shafts that can be as long as 3.5 meters.

#### 1-F - Seaweed Stilts

These were worn by workers when placing the Hibi in fisheries with water depths greater than their height. The stilts range in height from 30 cm to 150 cm and would be used interchangeably, depending on height.

#### 1-G - Swing Stick

A tool used for digging a hole to place the bamboo Hibi. Metal pieces are wrapped at the tip of the stick. Swing sticks used at deeper areas have longer shafts that can be as long as 3.5 meters.

#### 1-H - Seaweed Stilts

These were worn by workers when placing the Hibi" in fisheries with water depths greater than their height. The stilts range in height from 30 cm to 150 cm and would be used interchangeably, depending on height.

#### 1-I - Wood splitting platform

A work table used to craft both wooden and bamboo Hibi. The blade is brought down to cut theHibi wood and bamboo.

#### 1-J - Barnacle Remover

"Se" and "Sekkoro" means barnacles. It was used to remove the barnacles on the Hibis from the previous year before repairing them.

#### 1-K - Seaweed Weaving Machine

A step-on weaving machine that was used from around 1950. It was capable of weaving reedscreens 3 times faster than a weaving platform.

#### 1-L - Hibi for Growing Seaweed

A bundle of sticks made with wood or bamboo called "Hibi" was used to collect seaweed. In the past, the term Hibi referred to a fishing trap used to lure in fishes by forming a fence-like structure. The idea of collecting and growing seaweed with bundles of sticks originated from the situation of seaweed growing on trees and bamboo around fishing facilities.

#### 1-M - Hibi Placing

During the era of wooden and bamboo Hibis, the process of placing started during mid-September. A tool called a swing stick is used for digging a hole to place the tip of the Hibi. Depending on the depth of the workplace, 0.3 to 1.5 meters stilts are worn with the swing sticks adjusted to the appropriate lengths as well. Once seaweed nets started being used, poles were placed to put up the nets. When the seafloor was harder to dig into, pressure pumps were used to place the pumps.

#### 1-N - Making of Hibi

In the summer, they worked hard under the reed screen to make Hibis. Before World War II, bamboo Hibis were used and it was a job to remove the barnacles. Bamboo is reused for two to three years, so the barnacles, which are read as "Sekkoro" are scraped off with an iron spatula and reworked. The new bamboo is soaked in the river for a while to remove the oil and make it easier to attach the seaweed. After the war, when seaweed

nets became popular, every family bought palm to weave or palm tree nets.

#### 1-O - Seaweed Net (Hibi Net)

Because both wooden and bamboo Hibis were submerged during high tider, seaweed picking was bound to when the tide was low only. It also required an enormous amount of labor to transport the materials, make Hibis, and erect them. Seaweed nets alleviated this burden by allowing the nets to be pulled up from under the sea surface even when the tide was not low. The development of these nets began in 1920 at the experimental station of the Fisheries Training Institute (Goi, Chiba Prefecture) and on the coast of Chiba Prefecture after the Second World War.

#### 1-P - Hibi Hatchet

A tool used for whittling wood or bamboo and for striking branches. It was indispensable formanufacturing wooden and bamboo Hibis and bamboo poles for seaweed nets.

#### 1-Q - Bamboo Split

An equipment for splitting a moso bamboo with branches. It was used to make "tying Hibis," which are tied to the end of a bamboo pole.

#### 1-R - Drilling Chisel

To prevent the bambooHibi from falling out underwater, they used an iron bar to pull out the strands and drilled and punched holes with a chisel to weaken the buoyancy.

#### 1-S - Bar tightenings

It is also called a twisted ring stick. Wrapped and fastened with wire around the bamboo strips. If you hang the wire over the end of the kagi and twist it, you could bind the cracks more strongly than with pliers.

#### 1-T - Barnacle scrapers

The barnacles were called "Se" and "Sekkoro". Tools used in previous year to scrape off barnacles from bamboo Hibis.

#### 1-U - Seaweed net ruler

Ruler for adjusting the mesh of a seaweed net

#### 1-V - Netting Needle

Knitting needles for weaving seaweed nets. Homemade tools made from split bamboo.

#### 1-W - Hibi Tying Machine

This tool is used to bundle and tighten the bamboo branches, and is tied with chicken wire. Since a large amount of seaweed is attached to the bamboo Hibi, bamboo branches are bundled to make Hibi.

#### **1-X - Collection of Reed Screens**

The screens are for laying out and drying seaweed. <sup>1</sup>/<sub>3</sub> of the screens are replaced each year, with markers indicating years of use. The screens are then bundled and secured.

#### 1-Y - Rope Hooks

A Tool made from twisting thin ropes to make stronger, durable ropes.

#### 1-Z - Screen Cutter

Cutter used to measure and straighten the dimensions of the reed screens.

#### 1-AA - Screen Cutter

Cutter used to measure and straighten the dimensions of the reed screens.

#### 1-BB - Bamboo Screen Stand

A tool for weaving reed screens. The materials were the reeds that grew along the waterfront. Each adult weaved about 40 sheets in one day.

# 2. Seaweed gathering in the winter



#### 2-A - Seaweed net

The Nori net has been used since *Showa* 20 (1945) to grow seaweed. It's smaller in size and weight compared to the bamboo *Hibi* in its efficiency when gathering.

#### 2-B - Bōta

Bōta is a cold weather work garment, mainly worn when working in the sea. When the bamboo Hibi was still being used, workers had to stick their hands deep in the water to gather the seaweed, so their sleeves were made shorter in comparison to what is being used now.

#### 2-C - Ro

*Ro* was used to paddle a boat in the open ocean. A sailor would face the starboard end of the boat and use this primitive tool.

#### 2-D - Cloth Hanten

Since the Taisho ages, cold weather work garments have been produced with a double

layered front collar. On the wrist is a flat lock joint, and was also used when working on land.

#### 2-E - Bekabune

Also called *noritoritenma* and *beka*, the *bekabune* was manned by a single sailor. Loaded with wicker sieves and baskets, these boats were used on *nori* gathering expeditions.

#### 2-F - Bento Bachi

Workers along the shore stored their lunches in barrels.

#### 2-G - Carbide lamp

Nori gathering with a *Hibi* was sometimes done at night in the low tide, and the carbide lamp was used as a source of light.

#### 2-H - Nori gathering

The process of gathering *nori* was referred to as *teire*. Its early stages, which involved gathering raw material from *Hibi* found along the coast, began in early December. *Nori* could also be gathered directly from the sea using nets, which took place sometime between early November and March of the following year, depending on the particular tide activity of the time. Sailors would set out in *bekabune*, handling *nori* with their bare hands even in the dead of winter to get a better grip on the slippery substance.

#### 2-I - Paddle

Was used when navigating the boat by making strokes in the water. It is also used to transport the boat by poking the ocean floor, hence it is also known as a poking paddle.

#### 2-J - Rozuku

On a *bekabune* there are no paddle rest, so instead the *Rozuku* is placed in the boat to serve as a paddle rest.

#### 2-K - Boat license

A registration card for *bekabune* that was used prior to World War 2. The name of the owner, the port it's moored in, date of first launch is listed.

#### 2-L - Net Regulation Pillar

Post-World War II, Doctor Saburo Ueda began research on the rate growth of seaweed. Under his guidance, the Omori Seaweed Research Council established a minimum distance from the shore at which seaweed nets could be cast out. In 1955, this 120 cm pillar was erected to physically indicate this regulation.

#### 2-M - Round basket

A basket to put in gathered seaweed.

#### 2-N - Washing basket

A basket used to wash the dirt off the raw seaweed.

#### 2-O - Kakego basket

When washing seaweed on the sea, the *Kakego basket* was used as a temporary container for the seaweed from the *round basket*.

#### 2-P - Copper Kettle

Used in the transportation of seaweed from the coast to drying facilities or marketplaces

#### 2-Q - Tea barrel

Used as a tea or drinking water container for outdoor work such as *Hibi* making and *Hibi* erecting.

#### 2-R - Pakko

Footwear used before the invention of rubber boots. Shaped like a barrel, they had hard boards for soles, and were worn by seaweed harvesters when wading in shallow bodies of water until the early *Showa* period.

## 3. Creation of Seaweed during the winter



#### 3-A - Seaweed Cutting

The first step in making dried seaweed is to cut the seaweed into its proper shape. To create itas thin and flat, the seaweed must be cut up. First of all, to obtain the dried seaweed, workers go as early as 2 in the morning to a special workspace, commonly known as *tsukeba*. They are required to go early in the morning due to the most common method of day drying. All the seaweed must be out and ready before the sun rises.

#### **3-B - Seaweed Cutting Tools**

Since the Edo era (1603~1867), a common tool used to cut the seaweed were wide cutting knives. These knives were used by grabbing the tool with both hands and hitting the seaweed laid on a cutting board (created with Zelkova wood). As time passed, new tools were developed to make the process of cutting seaweed easier, for instance, some tools with more blades or easier to lift. After World War II, a new method of seaweed cutting was used, known as the MeatChopper.

#### 3-C - Seaweed Cutting Knife

A method of cutting seaweed since the Edo era, where 3 to 4 people surround the

seaweed on the cutting board and take turns cutting the seaweed to maximize efficiency.

#### 3-D - Tegata

"Tegata" Also known as Oni. The Tegata was a tool used to move the raw seaweed from the colander to the cutting board. This was used when handling a raw seaweed with one's hands, blades would become prone to slipping.

#### 3-E - Airplane Knife

An efficient method of cutting seaweed. A tool that 2-3 blades lined up flat to cut more seaweed.Named "Airplane Knife" due to the blades looking like the wings of a plane.

#### 3-F - Cutting Board

Made from the stems of the Zelkova serrata tree. Used to chop up raw seaweed. These are made from the stems of the Zelkova serrata tree. The tools are then used to chop up raw seaweed.

#### 3-G - Stab Knife

This is a special cutting tool with 6-8 blades. It can be tied to a bicycle tube and/or hung from the ceiling. Stab Knife is used to slice up seaweed.

#### 3-H - Chopper

This is also known as the seaweed cutting machine. The design being inspired by meat choppers, the toll was used mostly after World War II. Later, an electronic device was developed, reducing the manual labor needed.

#### **3-I - Hand Powered Water Extraction**

This tool extracted the water vapor from the seaweeds. The tools used centrifugal force (The forces necessary to keep objects in a curved path), Hence, it was fuel and energy efficient.

#### 3-J - Seaweed Holder

This was used as a drainer for extracting water from raw seaweed by placing a strainer inside it. It also was used to store seaweed.

#### 3-K - Seaweed Water Mixer

Shito Barrels were used to mix raw seaweed with fresh water. Each barrel could hold around 140 to 150 pieces of seaweed.

#### 3-L - Nori Tsuke Ban

Also known as the Tsukewaku. When the seaweed is dipped it is placed on this and this is used to decide the size of the dried seaweed

#### 3-M - Nori Tsuke

The process of drying sheets of seaweed is known as the "Nori Tsuke". Depending on the region, it is also called the "Nori Suki". This term originates from the abbreviation of the Japanese term of the pouring (Tsuke) of seaweed (Nori). During this process, seaweed attached to a reed sheet extracts water from the seaweed. One person can produce approximately 250~300 sheets of dry seaweed per hour.

#### 3-N - Seaweed Extraction Box

Also known as the Nori tsuke box. This box is used to pour the water mixed with seaweed to the Nori Tsuke Ban on the reed screen.

#### **3-O - Seaweed Water Extraction**

Tsukedai is used to make sheets of seaweed. Nori Tsuke is done on the right side of the table, and wet seaweed is left to dry on the left side.

#### 3-P - Seaweed Needler

A needle made from bamboo would hang the reed screen on a drying rack.

#### 3-Q - Seaweed Carrier

This would transport the seaweed that was recently dipped and still wet to a drying rack.

#### 3-R - Seaweed Portable Storage

This is a portable storage for the seaweed that is ready to be sold (dried and flavored). It is used to carry a lot of seaweed to the marketplace, approximately 1,800 sheets of seaweed.

#### 3-S - Seaweed Drying

In order to avoid the seaweed from shrinking, it is dried on the backside instead of the front side, where the seaweed is not directly receiving sunlight but it is receiving sunlight through the reed screen it's dried on. After that, it is flipped over to the dry side directly from the sunlight. After world war 2, the invention of stoves caused seaweeds to be dried using this method during bad weather.

#### 3-T - Weighting Wood

The dried seaweed is stacked in 10, then folded in half. This tool is then put under weight toensure it doesn't unfold.

#### 3-U - Seaweed Peeler

A tool used to peel off the dried seaweed from it's reed screen.

#### 3-V - Seaweed Drying Stand

Up until World War 2, this contraption made of straw sheets was used as a drying rack for seaweed. The seaweed would be pinned to the sheet while it dries.

#### 3-W - Seaweed Drier

This is a portable tool that can be used to dry the dipped seaweed.

#### 3-X - Seaweed Folder

This is used to compress the folded seaweed. The folded seaweed is compressed to ensure it doesn't unfold.

# 4. Transporting and storing Seaweed



#### 4-A - Purchase of seaweed wholesaler

When the season for seaweed came around, the middleman wholesalers in Omori purchased the dried seaweed. Several wholesalers would go around to the producers in groups and bid on the dried seaweed of the day, which was called "Niwasaki-Gai," writing down the price on a piece of paper. The "Joint bidding system" was introduced in 1953, where bids were collected by fishery cooperatives and voted on by writing the bidding price in chalk on a black-painted circular board called a "Bowl".

#### 4-B - Prevention of dried seaweed

Moisture is a great enemy of dried seaweed. If dried in the sun and stored as is, it will begin to deteriorate after half a month. Wholesalers need to store large quantities of dried seaweed produced in winter to last throughout the rainy season. In order to do this, the seaweed is "hired" to remove moisture from the seaweed, and then it is sealed or enclosed to prevent it from becoming damp again. The "enclosure" was placed in a seaweed box lined on the inside with tinplate and lined with Japanese paper.

#### 4-C - Dried seaweed storage box

Used by brokerage wholesalers for airtight storage (enclosure) of dried seaweed. Tinplate enclosures began to be used in the late Edo period. The lid was covered with Japanese paper to prevent it from being moist.

#### 4-D - Seaweed box

The seaweed box began to be used around 1935, replacing the pull-lid type. Dried seaweed was put in the lid and Washi paper was applied to the lid for airtight storage (enclosure).

#### 4-E - Roaster

A tool used by wholesalers to make arid seaweeds. It was used as a fire source such as a charcoal to the dried seaweed, then it gets stored in a seaweed box or other enclosure.

#### 4-F - Seaweed jar

A jar for airtight storage and preservation used during the Edo period. The seaweed was dried in a roasting furnace and placed in the jar, which was covered with a thick wood board and covered with Japanese paper.

# 5. Annual cycle of a seaweed



#### 5-A

Around January seaweeds start producing cells in their environment, which are necessary for survival.

#### 5-B

The reproductive system produces sperm cells, which then get drifted away by the waves into the sea until they reach an ova and fertilize.

#### 5-C

The fertilized egg then produces a spore.

#### 5-D

The spore then searches for a shellfish as host to germinate on, and eventually digs into limestone and becomes into a form that looks like a pile of thin threads.

#### 5-E

The matured seaweed grows into a string shape. At this time the sporangium is

formed and itonce again begins to release spores.

#### 5-F

The spore immediately starts to sprout when they attach objects such as a net.

#### 5-G

After 1~2 weeks of growing, the tip of the plant becomes a genderless reproductive cell and it once again starts to release simple spores.

#### 5-H

Repeating this process, the number of spores rapidly increases and grows into their leaf shape.



## 6. Ota District Seaweed Creation Development

#### 6 - Kyōhō Era (1721 ~ 36)

Built wooden Hibi to start collecting seaweed. The environment was optimal for seaweed collection

#### 6 - Enkyō Era 3rd year (1746)

Edo Shogunate introduced taxation on seaweed production

#### 6 - Hōreki Era (1751 ~ 64)

The Omori village (Consisting of North, East, and West Omori Villages) and Koujiya village had an argument on who gets more seaweed farmlands. The borders were decided by a line called the "Unoichibu" (East Line) and either village gained their parts of seaweed farmlands.

#### 6 - Bunka Era (1804 ~ 18)

As either village on the sides of the border fought over farmlands and "Yokosaku", which is a method of farming, they expanded their farmlands. Neither side gave up on taking the name of greatest seaweed producer. Omori Village was given the opportunity to give the high quality good seaweed to the Shogun, which was considered to be a highly respected role.

#### 6 - Bunsei Era (1818 ~ 30)

Land bordered by the Pacific Ocean started learning the methods of seaweed production

#### from Omori Village

#### 6 - Tenpō Era 7th year (1836)

In celebration of leyoshi Tokugawa's ascension to the title of shogun, the gathering of seaweed by the wave barriers at Haneda Village was authorized by the Tokugawa shogunate, for a period of a year. This official authorization was given in the year Meiji 3.

#### 6 - Meiji Era 1st year (1868)

Due to large donation to Meiji new government, Omori Village got a new seaweed farmland which is called "Kangunba".

#### 6 - Meiji, Taisho, Showa

Seaweed farmlands continued to spread. Until the 1930's, Tokyo (compared to otherprefectures) produced the most seaweed.

#### 6 - Showa period 2nd year(1927)

The plan of Seaside industrial landfill and creating a canal in the Yokohama to Tokyo area is executed. However, due to WW2, the plan was interrupted. The plan was resumed in the late 1950s.

#### 6 - Showa period around the 30th year(1955)

The seaweed farmland's waste begins to stand out

1954 Tokyo gas Omori factory has a big oil leak

1958 water pollution problem • fisherman's association

#### 6 - Showa period 35th year (1960)

A Ten year renovation plan of the Tokyo harbor was introduced.

#### 6 - Showa period 37th year (1962)

Fishermen were compensated due to renovation in December. Seaweed and fishing industries were halted as a result. 1963 spring was the final seaweed harvest

#### 6 - Showa period 39th year (1964)

Opening of Haneda branch of the metropolitan highway Completion of the Tokyo monorail Tokyo Olympics

## 7. Why are there so many seaweed shops in Omori?



When I was walking around Omori, there were seaweed shops everywhere.

Well yes, at first glance, the seaweed shops in Omori look like ordinary retail stores selling seaweed, but in fact, their main business is as wholesalers.

Wholesaler? What do you mean?

Many of the stores were wholesalers that collected seaweed as middlemen for the production areas when seaweed was produced in the seaside of Ota Ward. Since there are many wholesalers who are able to distinguish the quality of seaweed, even though the area is no longer a production area, seaweed from all over the country is still collected by the "Omori Honba Dry Laver Wholesalers Cooperative Association" and tendered.

# 8. Seaweed Clogs and Swing Stick



#### 8-A Experiencing the seaweed clogs (Geta)

Let's experience the "Seaweed Geta" and "Furiboh," which were used in the days of building wooden and bamboo hibi (from the Edo period to the early 1940s). Seaweed geta come in a variety of heights, from 30 cm to 170 cm, and they are worn at a height where the sea surface is around the waist and chest. A "Furiboh" is a stick used to make a hole in the sea floor. They shake the handle and step into the crotch of the swinging stick.

#### 8-B Instruction for getting on seaweed clogs

- 1. Please step on the seaweed clogs with your shoes on.
- 2. The clogs are stabilized on the floor.
- 3. Try stepping with one foot on the crotch.

#### 8- Hibi placing - Diorama

They made a hole in the seabed with a stick and inserted Hibi into it. In uncomfortable places, they wore seaweed clogs and used a swinging stick for stability.

## 9. Replica of a "Daruma boat"



Beginning from the dusk of the Meiji period, a considerable number of industrial facilities once existed along the coast of the Omori region. These factories relied heavily on a constant supply of large amounts of coal, which were provided by "Daruma boats".

The Tokyo Gas Omori Industrial Complex facilitated the loading of coal from large-scale container ships to the "Daruma boats" until the year Showa 48 (1973). The Omori Furusato no Hamabe Kouen (the park on which we stand now) has been built over the port at which the process took place.

The "Daruma boats" had no propulsion system of their own, so they were pulled along by tugboats in processions. As such, in addition to their round shape, they were dubbed "Daruma (barrel-shaped) boats". Living quarters were located on-board for the captains and their families.

While these "Daruma boats" were eventually replaced with more powerful steel ships after World War II, they were originally wooden rafts put together by professional shipwrights. This wooden replica was based upon a model designed by *Bekabune* shipwright Funatake, and ultimately created by his heir, Nobuki Kojima.

Scale of 1:15 【Length - 21mWidth - 8m Depth - 2m, Storage Capacity: Approximately 150t】 Replica built by Nobuke Kojima 【Pre-war shipwright: Funatake, Post-war shipwright: Higashi Zousen, Ota Ward, East Omori】

# 10. Oyubanakō Daidaigokagura Contribution Frame



Every winter, merchants arrived from the Shinshu Suwa region to Omori•Shinagawa. In 1861, Those Suwa merchants and their associates formed an organization named *Oyubanakō*.

*Oyubanakō*, on the year Meiji 17, July, dedicated the *daidai-kagura* to the *Suwa kamisha* section, and this frame is a donation that came from that occasion. In order to continue this project, the organization took donations from members of the seaweed industry located in Omori/Shinagawa/Nihonbashi to cover the funding of members. Then they commissioned an *Urushi* artist named *Shibata Zeshin* to paint the scenery of seaweed gathering in the Tokyo bay and the names of endorsers. 83 names from Tokyo, 1 from Sunshu Miho, 67 from Shinshu, and 19 others written in.

# **11. Seaweed Box for the Emperor**



Property of Mr. Goroku Ishi

This translation was done by Taizo Harada for his eagle project for the Boy Scout of America on July 31,2021.