SUMMARY

There are works of nature that have a dominant meaning for man, that go beyond their natural function, which embody the longings of humanity. At present, tourism is one of the most dynamic activities of the Ecuadorian economy. The shell of Spondylus, marine species of historical and cultural rescue and that is in danger of extinction is the largest species of the family Spondylidae in America. It is distributed from the Gulf of California, Mexico to Ecuador. A typical species of the genus is characterized by a large muscle attachment behind the center of the shell. Because of its ecological and economic importance, the research emerged by the lucrative business of shells extracted by the Spaniards for gold from the Andean mountains. Thanks to this exchange, in the mestizo culture that emerged, fruit of the coexistence of the two cultures, in addition to the analysis of a biological report in the area of Ayangue (Santa Elena), a research was conducted by the National Fisheries Institute (INP), which determined the absence of live individuals in the sectors "El Pelado", "La Viejita", "Tello", "El Acuario", "40" and "La Vieja", confirming that Spondylus shell did not exist in those sectors. It is based on the logical historical method and the theoretical systematization, the inductive-deductive, and analytic-synthetic.

Keywords: Spondylus, history, culture, Manabi, Salango.
INTRODUCTION

In Ecuador, Spondylus shell is found in three species: calcifer, princeps and leucacanthus. The Spondylus princeps, which takes place in the Manabitas coasts between Isla de la Plata and Salango, was a prestigious product that led to long-distance exchange networks, it was a symbol of power and ritual of the peoples of the Central Andes and Northern of pre-Columbian America; for the Manabitas peoples, it was also the sumptuary product, which allowed them to trade on the Pacific coast, from Mexico to Chile (Dueñas, 1986).

This is the Spondylus, the so-called "red gold" by the Incas. It is important to point out that this bivalve mollusk, belonging to the Spondylidae family, typical of the warm waters of the Pacific Ocean that bathe the coasts of Ecuador, is characterized by its striking rays that stand out in the midst of its striking coloration - in shades of yellow, orange, red and purple which contrasts with the white inside. It served in the Andean civilizations, for more than 5,000 years, as a ritual element for the agricultural and funeral ceremonies, because in the Aboriginal Era, this shell - which the aborigines called Mullu - had a high symbolic value, for what it was used for exchange between various cultures and became not only an important commodity but a measure of value and means of accumulation. The Spondylus began to be extracted and commercialized in the decade of the 80’s, starting in Salango province of Manabí, later it was extended to other fishing coves, reaching its maximum exploitation in the 90’s. Then progressively decreases its extraction until almost disappear in certain areas of the Ecuadorian coast.

The Spondylus and above all, the shell of the Spondylus has been a typical and ceremonial object of the pre-Hispanic American cultures. The mollusc reproduces in the warm waters of the northeastern Pacific, attached to submerged rocks at a depth ranging between 20 and 60 meters, which makes its extraction difficult and risky and makes it a coveted asset. Its presence presaged the appearance of rain and fertility, so its possession was a sign of good omens. Its use in the manufacture of necklaces and other objects for ritual
use reinforced its symbolic force. It was also an instrument of commercial exchange, a characteristic that transformed it into a true predecessor of the American currency.

The routes of its commercialization (maritime, coastal and mountain) played a role equivalent to the Camino de Santiago in Western Europe, curiously also associated with the shell of a mollusc, Pecten maximus. Today, the aim is to rescue the symbolic content of the Spondylus to enhance the cooperation between Peru and Ecuador, and with it the economic and cultural progress of the inhabitants of the Andean Central America.

It is important to note that the Spondylus calcifer is the largest species within the family Spondylidae in the seas of the American Continent. It is distributed from the Gulf of California Mexico to Ecuador. Capture areas in our country are located mainly on the east coast of Baja California Sur, Mexico.

The typical species of the genus are characterized by having a large abductor muscle scar and in the center of the shell. The cardinal area of the larger right valve and the ligament is deeply sunken. Due to the ecological and economic importance of S. cacifer a study was made on its basic biology and ecology. Organisms with heights between 40 and 170 mm were found. S. calcifer differs from S. princeps and S. leucacanthus because of its greater size and light brown coloration of the kidney, which are useful characteristics to differentiate them. The soft parts reach 122 g of weight. The abductor muscle of S. calcifer can reach on average up to 55% of the soft tissue weight. The breeding season occurs in summer, and the gonad reaches on average 8% of the weight of the soft parts, while the mature oocytes measure 55 microns in diameter on average.

**Spondylus in the economy**

The bivalve was introduced as a currency in commercial transactions, and this commercial function soon spread throughout America, parallel to the development of the Inca culture. Remains of the shell have been found in the
north of the Pacific coast of Mexico to the south of the Chileans, "fragments of Spondylus appear with the first pottery in the Atacama desert, around 500 BC. (Jorge Marcos, 2000)

Sustained Jorge Marcos (2010), the Manabitas people established "the system of the long-distance mullo traffic, they were part of a network of exchange between the people of the interior, as well as between the maritime people. Fray Pablo de Castro (1570 and 1575) quoted by Hocquenghem, says that: The merchants of Chincha brought from Puerto Viejo a lot of gold bead and many rich emeralds and they sold them to the Inca caciques, they sold copper Schaedel confirms what was said, in Muchik, from the Moche valley to Tumbes there is a northern influence, apparently linked to the procurement of spondylus.

The exchange of spondylus for prestige goods from other regions is documented; in excavations made in Manabí copper ingots were found, similar to those of Lambayeque, it was also used in the manufacture of utensils, ornaments, and ceremonial objects.

**Spondylus the red gold of the Incas**

The history of the Spondylus goes further, before the arrival of the colonizers in America, and the meeting between the two peoples, the Spondylus symbolized the great importance that the ancient pre-Columbian people felt for nature. From their gods, headed by the Pachamama (Mother Earth) next to the Sun god, the Moon goddess or the mountain spirits were a reflection that all natural phenomena governed the daily life of the Amerindians.

In this case, the appearance of Spondylus indicated that the rains caused by the El Niño phenomenon were close. This is explained when the marine currents of El Niño and Humboldt were found on the coast of Ecuador, causing the rains so necessary for crops on the Pacific coast. These rains were preceded by the proliferation on the beaches of the Spondylus princeps shells. From the time of the Valdivia culture in Ecuador, the behavior of the Spondylus, when according to the beliefs it left its habitat in deep waters just before the
arrival of the rains, when whole colonies emerge and redden the surface of the Pacific, it was conceived as a divine sign.

Therefore, they considered it a messenger of the gods before men and, later, mail or vehicle of communication in both directions. The Valdivian priests also learned that since the mollusc only reproduces in warm waters, news of their eventual presence on the Ecuadorian coasts was indicative of an increase in sea temperature (a clear symptom of the “El Niño phenomenon”), very heavy rains abundant and a bad harvest.

On the contrary, if the presence of Spondylus was or is scarce in that region, it means that the northern waters (usually hot) have lowered their average temperature. This generates a phenomenon inverse of that of El Niño, and it will surely be a year of droughts. In this way, the control of the sightings of the shell could be very significant to plan the agricultural campaigns.

The Spondylus quickly became a celestial object, and like the feathers of the male quetzal bird in Central American cultures, representation of the Mayan gods on Earth, its value went beyond the strictly material it had. The bivalve was introduced as a bargaining chip in commercial transactions, and this commercial function soon spread throughout the Americas parallel to the development of the Inca culture. An aspect that did not go unnoticed by the conquerors, who were eager to get gold, contemplated as for the Indians, the intense red nacre of the Spondylus was more important, if possible than the golden material and did not miss the opportunity to make a lucrative business for the which were exchanged shells extracted by the Spaniards for gold from the Andean mountains.

Thanks to this exchange, in the mestizo culture that arose, fruit of the coexistence of the two cultures, this mythification of the red gold was used, appearing in the divine representations, both in the new cathedrals that were populating the American territory as with the ancient rituals that were still preserved, where the Spondylus had a very critical mystical component, fruit of
this consideration as a connector between the earthly and spiritual worlds (Bataller, 2014).

A constant inclusion of the mullu in cults related to fertility. From the Valdivia culture, it appears linked to rain propitiation rituals. The fact that his arrival on the southernmost shores occurred in relation to the episodes of the phenomenon of The Child could make it considered as messengers of the gods.

RESOURCES AND METHODS

The historical-logical method and the theoretical systematization were used. To carry out the historical analysis of the shell of the spondylus as history and cultural rescue, we investigated bibliographic data, taking into consideration the following indicators:

- Antecedents privilege the study of the spondylus shell.
- Contribution to history and cultural rescue.

RESULTS AND DISCUSSION

The objective of this research is to contribute to the cultural and historic rescue of the Spondylus shell that was worth more than gold, considered a food of the gods, admired and coveted by pre-Hispanic civilizations from the Late Valdivia period until the arrival of the Spanish conquistadors in the XVI century.

It served as a transaction currency, personal adornment, to make anthropomorphic statuettes, zoomorphic sculptures, funerary offerings, as part of religious rituals and food of the gods.

It is ensured that the shell spondylus reached its greatest splendor with the arrival of the Incas, who kept it as a treasure and had it present in the most important religious events for them. In the Narrío archaeological culture these shells appear Spondylus princeps of red shells, Spondylus calcifer of a purple
lip, Spondylus leucanthus white porcelain, and many other varieties of seashell arrived by commercial exchange with the merchants of the coastal strip.

Spondylus shell was worth more than gold. It was considered a food of the gods, was admired and coveted by pre-Hispanic civilizations from the Late Valdivia period until the arrival of the Spanish conquerors in the sixteenth century. It is believed that the Incas came to the territory of present-day Ecuador behind this precious mollusk.

It served as a transaction currency, personal adornment, to make anthropomorphic statuettes, zoomorphic sculptures, funerary offerings, as part of religious rituals and food of the gods. Magico-religious beliefs in Mother Nature governed the daily life of pre-Columbian cultures, to the point that they believed that owning a Spondylus shell was synonymous with abundance, good omen, rain, was linked to fertility.

The fame reached by the mollusc demanded that networks of exchange be created that not only integrated the Andean cultures, but those of the most diverse regions of America. And it meant that the men and women who lived on the coasts of what is now Ecuador established workshops for the processing of this raw material, from where they began their journey -by sea and by land- the objects made in Mullu that have been found in places as diverse as the current American geography as the Bolivian highlands; the cultures that inhabited the present Peru, including the Inca Empire, that created special groups of chasquis (Mollo Chasqui Camayoc) to take the Mullu to Cusco, capital of the Tahuantinsuyo. And, what is even more prodigious, the ceremonial centers of the Mayan culture; Teotihuacán, the Aztec capital; Llullaillaco, in Argentina, or Chungará, in northern Chile.

Surely, from very old times, the shell of the spondylus was used as food by the ancestors of the Coast, as it is still done today; but its shell, for its unique characteristics, became an excellent material for the elaboration of prestige and distinction ornaments of the elite, and for its sacred connotation, in offering, which allowed it to be an object of exchange and reach coasts, mountains, and
valleys; be worshiped in temples by shamans; rest with the warriors in their graves; adorn the principal lords in ceremonial acts; decorate and dress the members of their lineages in the passage to the beyond. In this process, which took years in pre-Columbian times, the Spondylus was considered "favorite food of the gods" and an instrument of its members for contact with them and, therefore, an element of power.

From very early times, the spondylus shell was a symbol of fertility, not only because of its resemblance to the female vulva, its blood red color, its brightness and its exotic shape, but because its presence, linked to the warming of the ocean water, anticipated the rainy season, which gave it that symbolic dimension associated with fertility and abundance; and because its quality to migrate, when the temperatures of the Pacific Ocean rise due to the El Niño Phenomenon, from the deepest areas (15-60 m) to those closest to the surface, where they are within reach of fishermen-divers-extractors, they made that the collection of the Spondylus, or the absence of it, allowed our ancestors to determine, months in advance, if there would be rains or droughts, and plan their agricultural work.

The real and symbolic exchange that took place throughout Andean and Mesoamerica gives the Spondylus newsletter the character it had sought since its original version (October / December 1999), when the first issue appeared in printed format, and, then, in which it circulated until the beginning of 2002 in pdf format. Since May 2008 circulates on the network, biweekly.

Relata (Hermida, 2018) "In the Narrio archaeological culture, these shells appear Spondylus princeps with red leaflets, Spondylus calcifer with a purple lip, Spondylus leucantheus with white porcelain and many other varieties of seashells arrived by commercial exchange with the merchants of the coastal strip."; "The appearance of the Spondylus shells in hot water that bathes the Ecuadorian coastal beaches made that since ancient times the aboriginal people based on their experience, would be alerted to rain torrential precipitation. A climatic phenomenon that would link the seashells with the vital
force of the rain; infusing in the magic-religious spirit of the first communities: admiration, respect, reverence for its supernatural effects ".

This red and thorny shell was considered a symbol of life, of fertility, of abundance, its presence was an indicator of seasons of prosperity and its shortage of drought. Our first people, thousands of years ago, granted it mythical religious powers. It should be noted that due to the difficulty in its extraction must have been consumed by the elite and by the families of skilled divers.

The Spondylus shell has a great ecological importance on the seafloor, since in studies carried out on S. princeps by Mackensen et al. (2012) in the province of Esmeraldas, found a large number of organisms (more than 70 species) that live adhered or embedded in the shell, which in turn help giving a kind of camouflage to the shell against natural predators. The Spondylus, for more than a decade, was extracted from the rocks of the submarine cliffs where it is adheres especially in the south of Manabí.

Excessive extraction put in danger of existence of this mollusk. In an attempt to save it, the ban is in effect. The Spondylus resource is over, the little that remained are banks of juvenile shells, it is the zone of Cantagallo, to the north, until the Isla de la Plata to the south.

The Undersecretary of Fisheries Resources (SRP), imposed a permanent ban since it is an immediate measure to stop the extraction of the mollusk, appreciated for its meat in the form of medallions with this is looking for a certain hope to save the shell that was considered by the Manten culture as a delicacy of the gods. Now there are only Spondylus juveniles and not adults, but they are a promise to preserve the species as long as the ban is respected. (Quimi, 2011)

CONCLUSIONS
The importance of its shell lies in its history, which was used by indigenous peoples as a payment currency and as a ritual object.

It corroborates that it is a shell of a mollusc recognized by its strength and its external thorns.

The shell of the spondylus as culture and cultural rescue is indispensable to value it:

✓ As a prestigious product that led to long-distance exchange networks, this being a symbol of power and ritual.

✓ Very appreciated by the pre-Columbian cultures as an object of prestige and power of the rulers, for its powers to predict rain and drought, its representation of fertility.

✓ With the mullu in abundance the Niño was in full swing because it was hotter and it could rain in the deserts. According to the amount of mullu, the priests predicted the volume of the rain.

✓ The historical and cultural rescue allows the human being the ability to reflect on himself: "Through it, man discerns values and seeks new meanings." What makes it necessary and urgent to create mechanisms in every society, to make known or remember the historical information of the shell of the spondylus.

**BIBLIOGRAPHY**


