W-BRIDGE

ウミガメ類の生態調査を通じた希少種保全への啓発活動

東京大学大気海洋研究所　佐藤克文
NPO法人日本ウミガメ協議会付属黒島研究所

背景と目的

ウミガメの調査や研究は数多く行われているが、その成果が一般にまで伝わっていない。また、ウミガメの産卵地である砂浜と比べ、生活史のほとんどを過ごす海の中の調査は遅れている。そこで、一般の観光客らと共にウミガメの調査を行うことで、生態を解明するだけなく、既存の成果を一般に広く伝えたい。

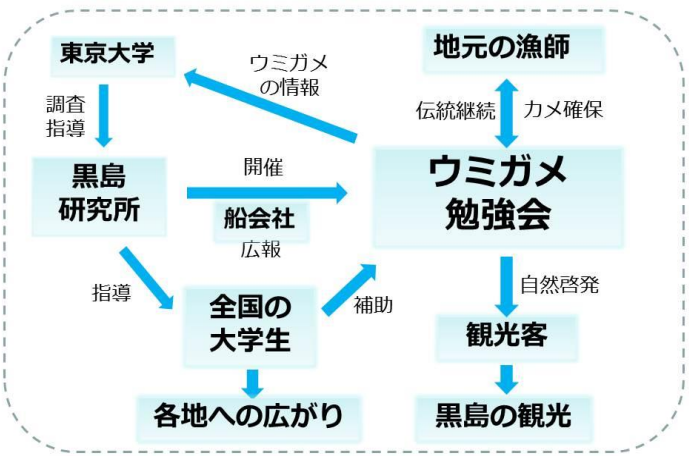
啓発活動

ウミガメ勉強会の開催

黒島に訪れる観光客を対象に、ウミガメの標識放流調査を通した環境保全活動のイベントを開催した。

a. 参加者への特点。ウミガメ測定記録てぬぐい、ウミガメが再発見された時にお知らせするハガキで、効果を持続
b. ウミガメの生態や陸ガメとの見分け方を説明する。全国の大学生と共に実施することで、次世代の育成にもつなげる
c. あしにつけた標識と放流前の測定。標識で個体識別し、再発見によって、何年でどのぐらい大きくなったかわかる
d. 砂浜に移動してウミガメを放流する。 勉強会の最後であり、標識放流調査のスタート。

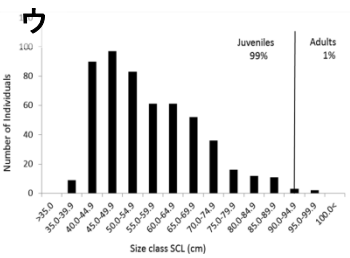
ウミガメ勉強会の効果

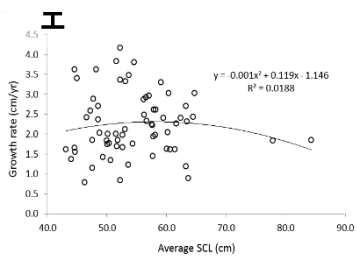


研究活動

ウミガメの生態解明

ア. アオウミガメの衛星追跡調査. 長距離の移動をせず、八重山海域に滞在した
イ. アオウミガメの交尾. 知見の少ないウミガメの交尾を探し、交尾海域を特定する調査を実施。





ウ. アオウミガメの甲長組成. 八重山諸島には未成熟の個体が多く、成熟個体はわずか1%。本海域はウミガメが大人に成長するまでの生育の場である。
エ. アオウミガメの成長速度. 標識放流調査の結果から、ウミガメは一年間に甲らの長さが平均で2.2㎝成長した。個体によって数ミリ～4cm以上成長するなど差があった。

活動の成果と展望

- 2015年7月～2016年5月の大型連休にのべ80日間開催し、合計1,332名が参加。昨年度 1082名よりも120%の増加
  啓発活動だけでなく、黒島の観光業に貢献した
- 伝統漁法によりアオウミガメを入手し、衰退している漁法の存続に貢献した
- 黒島研究所の研修生23名がウミガメ勉強会と調査の参加し未来の研究者の育成と活動の広がり
- 衛星追跡によって、アオウミガメは八重山に滞在していることが明らかに。八重山はアオウミガメの餌場である。
- 貴重な交尾の状況を記録した。
- 八重山のアオウミガメのサイズ分布、成長を明らかにした。

W-BRIDGE

Educational Activities on the Protection of Rare Species Through Ecological Studies on Sea Turtles

Katsufumi Sato (Atmosphere and Ocean Research Institute, The University of Tokyo)
Kuroshima Research Station, Sea Turtle Association of Japan

Background and Objectives

Countless studies and research on sea turtles are being conducted, but the results of these studies are not communicated to the general public. Compared to the sandy beaches that are the nesting areas for sea turtles, the field is lagging behind in studies conducted in the sea, where sea turtles spend the large part of their lives. Hence, by conducting studies on sea turtles together with general tourists, we aim to elucidate their ecological conditions and widely disseminate existing results of studies to the general public.

Educational Activities

Organizing Study Seminar on Sea Turtles

a. We organized an event on environmental conservation for tourists visiting Kuroshima by conducting tagging studies on sea turtles.
Special features for participants. Sustained effects through gifts of a washcloth containing sea turtle measurement records, and a notification postcard for when the sea turtles are sighted again.

b. Explanations about the ecological conditions of sea turtles, and how to distinguish them from tortoises. Conducting the activity together with university students from across Japan also contributes to the nurturing of future generations.

c. Attaching tags to the turtles' legs, and measurements before release into the sea. The tags identify individual sea turtles, and enable the researchers to find out how much they have grown in the number of years from the release to the time they are sighted again.

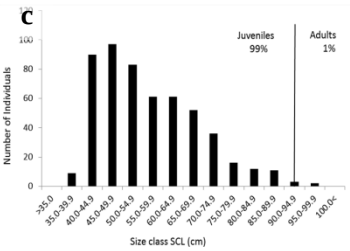
d. Movement to the beach, and release of sea turtles. This marked the end of the study seminar, and the start of the tagging study.

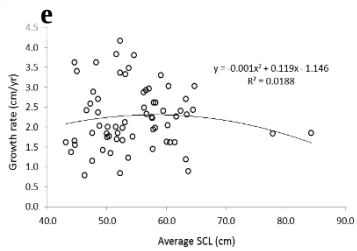
Research Activities

Shedding light on the ecology of sea turtles

a. Conducted satellite tracking survey on green turtles.
Observed that they stayed in the seas of the Yaeyama Islands without long-distance movements.

b. Mating of green turtles.
Explored the mating of sea turtles, which little is known about, and conducted a study to identify the seas that they mate in.

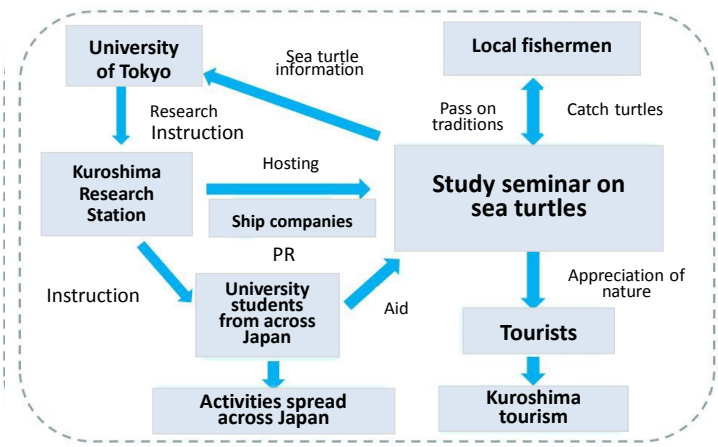




c. Composition of carapace length for green turtles.
There are many young sea turtles in the Yaeyama Islands, and grown turtles make up only 1% of all the turtles. These seas are the breeding grounds for sea turtles until they become grown turtles.

d. Growth rate of green turtles.
Based on the results of the tagging study, it was found that the length of the carapace of the turtles grew by 2.2 cm in one year, on the average.
Depending on the individual, there were differences in growth ranging from several millimeters to more than 4 cm.

Effects of study seminar on sea turtles



Activity Results and Outlook

● The study seminar was held from July 2015 to the long holiday season in May 2016 for 80 days in total, and a total of 1,332 people participated in the activities.
The number of participants increased from the previous year by as much as 120% from 1,082 people. In addition to serving as educational purposes, the event also contributed to the tourism industry of Kuroshima.
● Obtained green turtles through traditional fishing methods
Contributed to the continued survival of fishing methods that are on the decline.
● 23 research students from the Kuroshima Research Station participated in the study seminar and survey on sea turtles.
Nurturing researchers of the future, and expanding and spreading activities.
● Through satellite tracking, it was found that the sea turtles stay in Yaeyama.
Yaeyama is a feeding ground for sea turtles.
● Valuable records were kept on the mating of sea turtles.
● Data was obtained on the size distribution and growth of green turtles in Yaeyama.