



Discovering Nature Piece by Piece

"You have to be all-rounded", says Professor Mamoru Watanabe at the University of Tsukuba, as he talks about the difficulties of being an ecologist. To study the life cycles of animals and plants you need to have knowledge and techniques from the fields of statistics, genetics, biochemistry, physiology, and a lot more. A wide variety of tools are needed and, he remarks, "you need to get the most out of what you've got".

In this way Dr. Watanabe has sought to draw potential out of a broad range of interests. He has uncovered many exhilarating findings

such as male damselflies that rake out the sperm of rival males from their mate, male swallowtail butterflies that charm their cherished female with attractive gifts, and how each of these unique lifestyles and morphologies have evolved. In studying some of these topics, his lab makes field trips with citizens from various social backgrounds. Subsequent discussion of the results they find together presents the participants with amazing views of life and the world.

Mortonagrion hirosei, an endangered species of damselfly, inhabits dense reed beds in

estuaries, and its larvae grow in brackish water. The Watanabe lab leads a project in Mie prefecture to conserve them. In order to replace the original habitat (soon to be turned into a sewage treatment plant), reed rhizomes were densely planted in a larger adjacent site. The new, artificially-established habitat grew to become the same as the original and, simultaneously, the population of *M. hirosei* successfully increased. However, effective maintenance has become imperative since reed density began to fall after five years.

It may be impossible to achieve a



perfect score when attempting to restore nature. However, through ecological research that one by one reveals the purpose and function of every living thing, we can carefully extract nature's clues. These can help us find some answers on how to live side by side with nature.



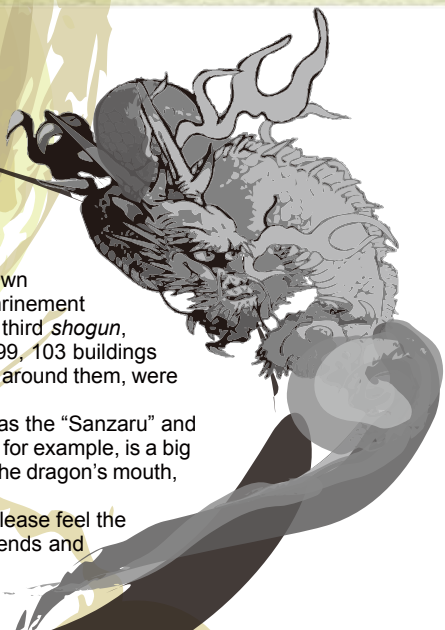
History of Nikko

The history of Nikko began in the eighth century when a priest built a temple there named Shihonryu-ji. This temple is now known as Rinno-ji temple. The famous Toshogu shrine was built in 1617 for the enshrinement of Japan's first *shogun* (master of the samurai), Tokugawa Ieyasu. In 1636, the third *shogun*, Tokugawa Iemitsu, rebuilt it as the more luxurious shrine that we know today. In 1999, 103 buildings of Toshogu shrine, Futarasan-jinja shrine, Rinno-ji temple, and the natural environment around them, were all registered as a World Heritage site—the "Shrines and Temples of Nikko."

There are many artistic works within Toshogu shrine. The "Nakiryu" painting, as well as the "Sanzaru" and "Nemurineko" wood sculptures are particularly famous. The "Nakiryu" ("Crying Dragon"), for example, is a big painting of a dragon on the ceiling in the Yakushi-do hall. If you clap your hands under the dragon's mouth, it sounds like the dragon is howling.

There are more interesting spots in Nikko which express the Japanese spirit. Please feel the Japanese spirit while you are in Nikko during the excursion, and tell your friends and family in your country about it.

Have a nice trip to Nikko.



Within the grounds of a temple in Nikko there is a famous woodcarving called "Nemurineko" or 'sleeping cat'. Immediately behind the cat are carvings of other creatures. What are they?



- A. monkeys B. mice C. sparrows

(By the way, "Nemurineko" is small and not very obvious, so be careful not to miss it when you visit Nikko.)

Answer to yesterday's quiz : B
"Gorilla gorilla" is the scientific name for the Western Gorilla. It is divided into two sub-species, the Western Lowland Gorilla (*G. g. gorilla*) and the Cross River Gorilla (*G. g. diehli*).

Today's Quiz

Students' Community of IBO (SCIBO) Team-J

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The Daily News of IBO 2009

"All of You Are Already Winners!"

The opening ceremony of IBO2009 was held at the main hall of the Tsukuba International Congress Center. The students entered the hall holding the flags of their countries.

Team Argentina entered first, followed by Team Armenia. Team Armenia is one of two countries which join IBO for the first time this year. The other is Team Sri Lanka.

Each team gave a cheerful greeting on the stage and some had their own very original way to present themselves. Team Greece announced loudly "ここに來られて、うれしいです", (*Kokoni korarete ureshii desu*) in Japanese, which means "I'm happy to be here". Team Liechtenstein received loud applause, perhaps because the 'team' was only one student in total, and Team New Zealand performed and shouted the *haka* dance of the Maori people.

Dr. Poonpipope Kasemsap, the Chair- person of IBO Coordinators,

con- gratulated students for winning their national Olympiads and said "All of you are already winners!" He concluded that "all of you can win the most valuable prize ever—friends". He believes friends are important for students to improve their future chances.

The Oath by Student Representatives was read out by students from Team Japan. Later they said they had practiced for about two months, and the hardest part for them was the pronunciation of "solemnly".

After the ceremony, the teams had a chance to talk to each other in the hall. Compared to the first day, more teams were enjoying talking with their friends from other countries.

In fact, when a Jury member from Ireland asked Kawaraban to take photos of his team, for a moment he couldn't find his students because they were chatting so happily with other teams. According to Dr. Kasemsap, a member of Team



Argentina declared that he would make 220 friends this week, which is the number of all the other IBO2009 competitors.

Not all teams had recovered from their trip, however. Team Switzerland looked slightly tired and they rested in their seats. One of them said he had jet lag.

Yesterday IBO2009 Tsukuba started officially and today the students will

have their practical exam, which is one of the most important events of the week. To get a good score is not the only aim of the IBO, but it is certainly important. So, good luck everybody!!

Preparation Is Complete

After the welcome party, students visited the University of Tsukuba, where the practical and theoretical exams will be held. Everyone seemed to be enjoying themselves, chatting and looking around in excitement at unfamiliar things.

The participants were divided into three groups, and walked around the examination venues following their team guides. Although unaccustomed to speaking English, team guides explained in detail which classroom to go to, how to use the chairs, how to use Japanese toilets, and so on. *Otohime* was the center of curiosity—the fake toilet flushing sound (to disguise embarrassing bodily noise) exists only in few countries.

Throughout the laboratory tour,

the participants seemed to be calm and relaxed as they chatted freely. Some students commented on the flags attached to the desks, saying that the flags will cheer them up and motivate them during the exam. There was one tense moment when a team member was separated from her team guide, but they were able to reunite smoothly. Their obvious relief when they found each other showed how close they have become in just one day.

Satisfied with the laboratory, the contestants left in high spirits. Everyone and everything is now prepared. Let the exams begin!



Fine weather with evening shower



Today's Schedule

Students Schedule

- 6:30 - 8:00 Breakfast
- 9:30 - 17:30 Practical Exams
- 13:00 - 14:00 Lunch
- 17:30 - 18:30 Dinner
- 20:00 - 22:00 Origami Night

Jury & Observers Schedule

- 7:00 - 7:45 Breakfast
- 7:45 - 19:45 Excursion (Nikko)
- Lunch
- 20:00 - 21:00 Dinner

High 29°C
Low 21°C
Humidity 63%
Chance of rain 50%

Participants Enjoy Welcome Party!!

After the opening ceremony, the mood in the Tsukuba International Congress Center had become more relaxed and cheerful, and it was time for the Welcome Party. During the party, while everybody was enjoying a delicious lunch, Their Imperial Highnesses Prince and Princess Akishino talked briefly with participants around the floor. They encouraged the contestants to do their best in the competition.

To decide the menu for this party a national recipe contest was held among high school students. The name of the winning dish was *ibarakisaisai*. It is a kind of sushi using

tomatoes, green peppers, and lotus roots. It was very popular among contestants, along with regular kinds of sushi. Some mentioned that it was difficult to use chopsticks, because they had rarely used them before, perhaps only for eating Chinese food.

It was obvious that many of the students are beginning to make friends with participants from other countries. As an indication of friendship, team members from Denmark, France, and Kyrgyzstan had a lot of fun exchanging their costume hats. Dressing up for the opening event had provided much entertainment, as well as a chance to see each other's traditional national dress.

The Color of IBO

The participants had a lively air about them today, both physically and mentally. The special, characteristic outfits worn by many countries was not only visually colorful, but seemed to brighten up the contestants' spirits. Many wore traditional clothes from their home countries, like *osari* from Sri Lanka, and *dishdasha* and *abaya* from Kuwait. Others added accents to their coordinated styles by wearing colorfully patterned ties, like the UK and the USA, or unique shaped hats, like France and Mexico. Some participants had even dyed their hair in their nation's colors. Looking around the party hall, many

cultures could be seen together. Apart from competing, this is what IBO is all about: meeting people from all over the world and making new friends!



"Kanagawaoki Namiura" by Katsushika Hokusai

This picture is an ukiyoe wood-block print named "Kanagawaoki Namiura" made by Katsushika Hokusai. *Ukiyoe* prints show scenes of everyday life in the Edo period (1603-1868). This is one of the famous works included in "Thirty-six Views of Mt. Fuji". It portrays waves off the coast of Kanagawa prefecture, with Mt. Fuji behind. It is said that Hokusai had great difficulty in sketching this picture because the waves were moving, and the curves needed to be described in fine detail. So this is a masterpiece that took him half a year.



▲ We made new friends!

Team Pakistan ▶



Team Denmark

Team Thailand

Team New Zealand



Team India

Team Ukraine



Team Korea

This IBO has the most participants so far --- 221 students from 56 countries and regions. How many have you met?



Ibarakisaisai

Their Imperial Highnesses Prince and Princess Akishino gave words to the winner of the recipe contest, Mana Ametaki.



Throwing hats --- entertaining performance by Team France ▶



Team China

Team Vietnam

Bushy hair!



Party time!



Jury session ▶

Comments at the Cafeteria

The last event of the long day yesterday was dinner at the cafeteria of the University of Tsukuba. As a measure against swine flu, the participants disinfected their hands before entering, and they could choose whatever food they liked. After spending one or two days in Tsukuba, they seemed to be relaxed, and more conversations with other participants and volunteer staff were seen.

Here are some comments from students facing the first exam.

Team China:
Our aim is simple: Do our best and get the best score we possibly can. When checking the practical test room and the apparatus placed there, we could identify some of the instruments and recognize how to use them. So what we need to do is not panic, and just be our natural selves. We also like Japan's clean environment. So if time permitting, we want visit the city and go shopping.

Team Korea:
We are very motivated! We cannot guess what kind of questions will come up, but we are not so nervous about it. We have been working hard, so we think we can gain what we deserve. But we will try our best. We are also looking forward to talking with other participants after the exam so that we can exchange opinions and make new friends.



▲ Participants arrived for the orientation at University of Tsukuba.

It was a Long Night for the Jury

As the practical exams are starting today, a jury session was held yesterday in the Tsukuba International Congress Center from 2 pm. The spacious hall had three large screens at the front of the room, and the jury members from the various countries from around the world seated themselves at their assigned tables, one by one.

There were two main tasks for the jury members in this session: one, to discuss and revise the exam questions and, secondly, to translate them for the students to solve. One jury member commented that

these are absolutely necessary factors within IBO. Reaching a consensus amongst jury members is essential in order to ensure a fair contest, and appropriate translation is needed for the participants to demonstrate the best of their abilities.

Because of the difficulty and quantity of the questions, one jury member said it would take hours (perhaps until 5 am in the morning) to reach a conclusion. It was surely a long night for the jury, but their effort and enthusiasm is key to constructing the framework of IBO2009 and leading it to success.