

# Living with the Environment in Mind

Recently we have become keenly aware that climate change, destruction of the ozone layer, and other environmental problems can directly affect our daily lives. Such problems arise, moreover, in a context in which all manner of human activities have become complexly intertwined. In order to combat them, people have to work together at the national and local levels and must create systems for finding solutions through cooperation that transcends national boundaries as well. Equally important is awareness and action on the part of each individual to protect the environment and conserve its resources. In this issue we introduce various efforts being made in Japan, particularly by ordinary people as part of their daily lives.



This mark indicates that more related information is included on the "Click Japan" website. <http://www.tjf.or.jp/clicknippon/>

## The Ecology 3Rs

In Japan, environmental preservation efforts are promoted under what are known as the "3Rs": **reduce, reuse, and recycle.**

### Reduce リデュース



#### Conserve Energy and Resources, Create Less Trash

Turning off lights and running water as much as possible, reduction is the basic principle, both in the household and in business. The Ministry of the Environment promotes conservation in the business environment, calling on corporations and government offices to set air conditioners at 28 degrees centigrade (just a little higher than comfortable in Japan's hot, humid weather), and suggesting that white-collar workers dispense with neckties and jackets so they can work comfortably at that temperature. This campaign has been dubbed "cool-biz." Approaches like this through which individuals can practice "reduction" to protect the environment in the course of their everyday lives have received a lot of attention.

some local governments have instituted ordinances requiring a charge for plastic bags, and some supermarkets reward non-use of plastic bags with points that can be collected to receive discounts, gifts, and other benefits. The eco-bag boom took off around 2007 partly because a famous fashion brand added one to its line of products. Now all sorts of eco-bags are available—smart, fashionable, or just functional.

### Eco-bags

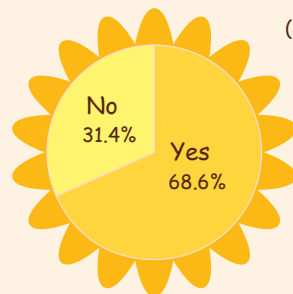
People once went shopping with handbaskets to carry home their purchases. Paper bags were used to package some items. Since the late 1970s, cheap, sturdy polyethylene bags became available to carry items purchased at supermarkets and other shops. Today, Japanese shoppers use some 30 billion plastic bags annually, an amount equivalent to 15 million barrels of oil.



At the cash register, cards are provided saying "no plastic bag needed." Customers who bring their own carrying bags place this card with their purchases.

In order to reduce the consumption of plastic bags, people are starting to bring their own bags to the grocery stores, increasing what is called "eco-bag," or "my-bag" use. Also,

Q1: Do you have an eco-bag?

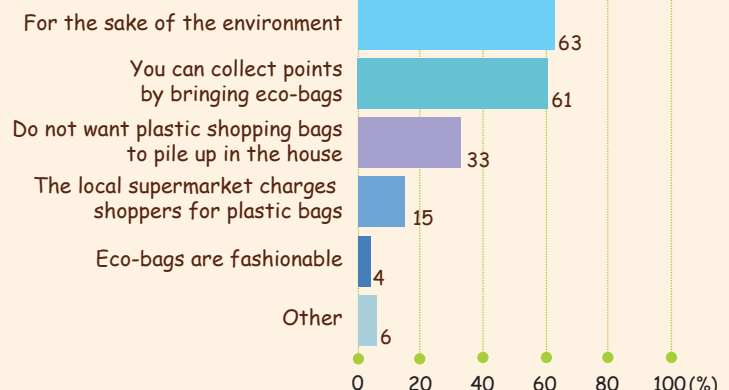


(n = 437)



Q3: Reasons you have an eco-bag

(n = 632)



Methods of wrapping or bundling with a long tradition in Japan use what are called *furoshiki*. These square cloths of different sizes, which can be tied in various ways to carry things of assorted sizes and shapes, fold up flat when not in use. The merits of such bundling items that are handy and can be used over and over have won renewed attention.

**Furoshiki Study Group:** <http://homepage3.nifty.com/furoshiki/>



Two bottles wrapped using a *furoshiki*.

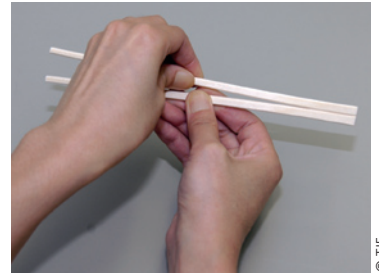


A carrying bag made by tying the corners of a *furoshiki*.

## Personal Chopsticks

In Japan, restaurants often provide disposable chopsticks (*waribashi*) and convenience stores, too, generally hand them out with the purchase of bento, salads, or other prepared foods. The wood or bamboo from which the chopsticks are made is

divided part way, leaving a section to be split apart by the user. *Waribashi* are usually discarded after a single use. According to the Forestry Agency, about 25 billion pairs of disposable chopsticks are thrown away each year.



*Waribashi*

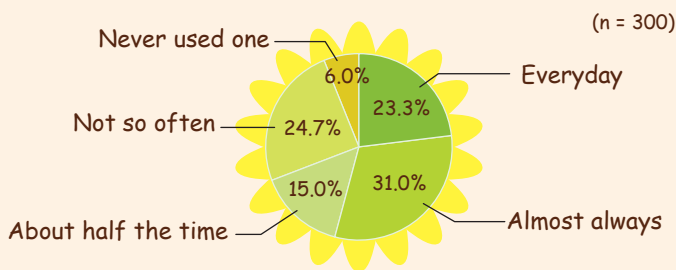
Concerned by the waste represented by disposable chopsticks, an increasing number of people now carry their own chopsticks (known as "my hashi") when they go out to eat. Convenience stores, too, have begun asking customers if they need chopsticks and some charge for including them with the purchase.



Various styles of personal chopsticks. Some are made in collapsible parts for compactness.

(To those who said "yes")

**Q2: How often do you carry eco-bags for shopping?**



Source: "Survey on Attitudes Toward Eco-Bag Use," Ishare Inc., 2008

**Q4: Why do you not have an eco-bag?**



Source: "Survey on Eco-Bag Use," joint survey by Goo Research and the Yomiuri Shimbun, 2007

## Which is better for the environment?

Because many different factors are involved, opinion is divided on what kind of action should be taken for the sake of the environment. For example, one view applauds eco-bags because they help reduce the amount of trash and preserve the resources used to produce plastic bags. Others counter that it actually involves more energy to manufacture, transport, and sell the eco-bags, and that without plastic shopping bags, people who have used them for bundling trash must simply use other bags instead. The debate over disposable chopsticks has been going on for a long time as well.

We may find it difficult individually to confirm the facts on such matters, but it is important to act vis-à-vis the environment based on our own judgment, rather than be overly influenced by trends or popular views.



### Disposable chopsticks

#### Arguments for

- They are the most sanitary because they are not washed and reused.
- Chopsticks in Japan are made out of lumber remnants, in other words, from materials of low value for other purposes, thus making effective use of already available resources.
- The timber from which most disposable chopsticks in Japan are made comes from trees cut for thinning and maintaining forests, so using disposable chopsticks supports good forest management in Japan.

#### Arguments against

- Nothing "disposable" is good.
- Japan does have large stockpiles of wood that would make good raw material for disposable chopstick manufacture, but high transportation and labor costs render made-in-Japan disposable chopsticks relatively expensive, so over 90 percent are imported. This could accelerate deforestation in East and Southeast Asia.

## Recycling リサイクル



### Reuse in a Different Form

Through collection and sorting of waste generated by businesses and households, recycling converts discards into resources to be used again. Up until the 1980s, waste was divided only into combustible and non-combustible trash, but during the 1990s, with the institution of laws such as the Law for Promotion of Sorted Collection and Recycling of Containers and Packaging that mandated effective use of resources, the separation of waste products became more advanced. The details of trash separation differ from one local government to another. Some stipulate 20 or even 30 different categories, but the most common are: bottles, cans, PET bottles, plastic containers, food trays, milk cartons, batteries, light bulbs, and paper/newspapers. Examples of products manufactured from recycled resources include toilet paper made of milk cartons, synthetic fiber made of PET bottles, and books made of recycled paper.

In recent years, corporations are attempting to establish large-scale systems for recycling. In 1998, the Law for Recycling of Specified Kinds of Home Appliances was instituted, mandating local governments and appliance stores to collect air conditioners, television, refrigerators, and washing



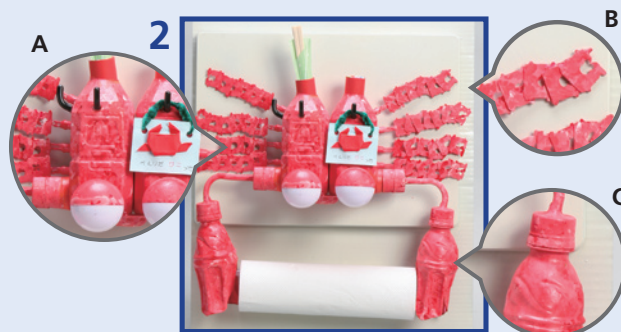
Aluminum and steel cans, PET bottles, glass bottles and other types of trash are separated and collected for recycling.

machines to be refurbished or their parts and materials separated for recycling.

### Can you tell what this is made of?



© Ohashi Hiroaki, Nagoya City Fujigaoka Elementary School/  
Chuden Foundation for Education



© Ishiguro Kota, Ena City Kami Yahagi Elementary School/  
Chuden Foundation for Education

For the answer, see the "Click Japan" site.

Award-winning works of the Recycle Craftwork Contest (1 for 2008; 2 for 2005) for elementary school children held by the Chuden Foundation for Education.

## Reuse リユース

### Using Things Again

Japan has a long tradition of frugality. Whatever it might be, people say, "mottainai" ("waste not!") and endeavor to find a second use for everything: children's clothing is passed down from older to younger siblings or to acquaintances, paper bags and wrapping paper are saved and reused over and over, and so on. The market, too, supports this virtue: there are recycle shops nationwide for clothing and household furnishings, and there is a huge market for used books. Glass bottles (called "returnable bottles") and jars are collected to be reused. As society became more economically and materially affluent, people did begin to throw things away rather than endeavoring to reuse them, but with the establishment of the 3Rs, people are beginning to return to the time-honored culture of thrift and reuse.



Stores selling secondhand goods, called "recycle shops," sell household appliances and furnishings and all sorts of other goods.

## "Mottainai" もったいない

The Japanese word *mottainai* is said to have originated in Buddhism, to express the grief one feels when an object ceases to be the way it should. Today, the word is used as a kind of protest against waste, and regret that its true value was not put fully to effect.

When Wangari Muta Maathai of Kenya visited Japan in 2005, the year after she became the first African woman to receive the Nobel peace prize for environmentalism, she came across with the word *mottainai* for the first time. Ms. Maathai was deeply impressed by the word, which not only expresses the principle of the 3Rs, but is also filled with compassion, gratitude, and respect for nature and everything in it. She later proposed at the United Nations Commission on the Status of Women held at the U.N. headquarters in New York to embark on a global *mottainai* campaign to use natural resources more effectively, which led to the beginning of the global-scale *mottainai* campaign.

In Japan, the Asahi Shimbun Company opened a *mottainai* campaign headquarters, expanding the movement into many different fields with the help of numerous corporations and organizations.

**Mottainai website:** <http://mottainai.info>.

## Passing On the Wisdom of Preservation

Consuming food produced locally, not wasting food, keeping the amount of garbage to a minimum, using public transportation rather than private cars—all these are ways to protect the environment, but only a few decades ago in Japan, they were simply the ordinary way of doing things. We cannot turn back time and live the same lifestyle again, but people are beginning to learn from the wisdom of those days and put it to use in new ways for life in the present age.

### Mission Greater Edo Uchimizu

When the sun beats down mercilessly, especially in the summer, it is customary to sprinkle water on the streets and alleys of the city as a means of mitigating the heat. This is called *uchimizu*. The temperature goes down after water is thus sprinkled because heat on the ground is released into the air with the



People taking part in the Mission Greater Edo Uchimizu sprinkling campaign in Ginza.

© Mission Uchimizu Headquarters

evaporation of water. According to one research institute, if one liter of water per one-square-meter area were sprinkled wherever possible in the city, the temperature would go down two degrees. Sprinkling water also has the psychological effect of making one feel as if it were cooler.

The “urban heat island” effect (in which the temperature of urban areas rises abnormally higher than surrounding areas) has recently taken hold in many cities, raising the quantity of electricity consumed for air conditioning to the point of causing shortages in the supply of electricity. In the summer of 2003, under the slogan of “Mission Greater Edo Uchimizu,” a certain non-profit organization put out a call to urban citizens aimed at mobilizing the custom of *uchimizu* on a large scale to reduce the amount of heat in the city. The project has been continued annually since then, and the number of participants in 2008 is estimated to be over seven million.

Note that, in order to save water, the first and foremost rule for this event is to use leftover water from bathtubs or water collected from the rain rather than tap water.

### Reusing Bathtub Water

Throughout Japan, the traditional deep bathtub is filled up every day for a hot bath. The average tub holds 200 liters of water. Many households have long reused this water for laundry, cleaning, and watering the plants. Special pumps are sold to help transfer water from the bathtub to their washing machine.



Hose and pump for recycling bath water for laundry.

© TIF

### Mottainai Baasan

In the children’s book *Mottainai Baasan* (Mottainai Grandma), published in 2004 by Kodansha, an elderly *obaasan* finds people doing wasteful things. Calling out “mottainai,” she does many things with the things they are about to throw away. The series currently appears in newspapers and magazines. Starting in 2008, “Mottainai Grandma’s World Report Exhibit” makes a tour around the country, explaining the current situation on various problems faced by Earth and by the children involved in them. English/Japanese Bilingual version is also published by Kodansha.

<http://www.mottainai.com/>

<http://www.mottainai.com/englishtop.htm>



© Shinju Mariko, 2004, published by Kodansha



じゃーじゃー  
おみずの だしっぱなし  
もったいなーいと  
いってくるよ

Splash splash  
Leaving the water running.  
She will come and say,  
“Mottainai!”

© Shinju Mariko, 2004, published by Kodansha

### Let's Try!

The following list of words, 1 through 7, are taken up in the “Japanese Culture Now” article in this issue. Reading the hints provided in the parentheses, try to guess the meaning of the word.

Next, try checking off the items that are recycled in Japan. Remember, you read about it in the column, “Recycling: Reuse in a Different Form.”

1. 牛乳パック   
(how do you say “gyunyu” in English?)
2. ペットボトル   
(this word comes from an English acronym)
3. わりばし   
(the word is given in romanized form in the article)
4. レジ袋   
(“reji” comes from the English word “cash register”)
5. ビン   
(something made from glass)
6. 缶   
(the word for a container made of either steel or aluminum)
7. エアコン   
(household appliance used to regulate indoor temperature; this word is the abbreviation of an English term)

Answers can be found at

<http://www.tjf.or.jp/takarabako/bi.htm>