# As a good global citizen and IT service provider, we are fully committed to activities contributing to environmental protection.

#### Involvement in Environment Activities at the Local Level

Think globally while acting locally is a fundamental key to protecting the global environment. Initiatives that are closely connected to local communities include "Operation Clean Environment" and the ongoing "DoCoMo Woods" program to groom forests and maintain trails. Other environmental supports activities in 2003 include the development of a novel environmental purification and cleanup agent using sludge produced as a byproduct when recycling used paper, and an IT-based monitoring system to thwart illegal dumping.

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#### Involvement in a Project to Clean Up the Cooperative Project to Clean Up Yoda River near Kakogawa City

NTT Access Network Service Systems Laboratories has been working on a new material called Micro Porous Material (MPM) made of incinerated ash of sludge produced as a byproduct when recycling paper that is very effective for purifying water and noxious gases. In a cooperative project with the Hyogo Branch Office of NTT WEST, the MPM has proved effective at cleaning up a stretch along the Cooperative Project to Clean Up Yoda River near Kakogawa City. Ultimate proof of the success of this project is that the fireflies have returned to the river's banks after a long absence due to pollution.

The MPM exhibits high cation exchange and remarkable absorption properties. It was found that by lining the river with MPM balls or plate shaped pieces of MPM, the Biochemical Oxygen Demand (BOD), an index of organic pollutants, fell by 80% and there was a 40% drop in nitrogen and phosphorus in the water. The MPM used for water cleanup was found to be saturated with nitrogen, phosphorus, and other nutrients used in fertilizers. Since the MPM is mainly composed of soil, the additional nutrients picked up from the water can later be returned to the soil to complete the natural cycle. Lane Side walk Bridge Bidge Bidge Bidge Bidge

MPM Eco balls, and MPM Eco plates MPM Eco plates deployment

## Monitoring and Protection of Mount Fuji Using Camera-Mounted Cell Phones and GPS

Areas around the base of Mount Fuji are strewn with abandoned cars, broken furniture, waste wood materials, tires, and all sorts of industrial garbage that have been illegally dumped there. DoCoMo Systems stepped in to help the Mount Fuji Club, a non-profit organization dedicated to preserving and protecting the mountain's beauty, by developing a system based on camera-mounted cell phones and the satellite-based global positioning system (GPS) to take pictures and map the illegal dumping sites. Armed with this data collected by the system, the Mount Fuji Club sends updates and notifications to the government, compiled a "Mount Fuji Garbage Map," and put up a website to draw people's attention to the issue.



When pictures are taken of dumped garbage by a camera-mounted cell phone, the exact position is registered over the network by GPS.

### **DoCoMo Woods Promotes Forest Conservation Together with Local Communities**

DoCoMo Woods is a forest maintenance initiative started by the NTT DoCoMo Group as a part of our natural environmental protection activities. We have been implementing the project since 1999, making use of the "Corporate Forests" system of the Japan Forestry Agency. The objective of this reforestation effort is to deepen information exchanges between DoCoMo employees, along with their families, and local residents, while preserving rich ecosystems and beautiful landscapes through such forestry activities as planting trees, clearing brush, and maintaining hiking trails.

As of March 2004, DoCoMo Woods had been established in 22 locations and some 4,400 employees and their families have taken part in the activities. Next year, we plan to establish DoCoMo Woods in Kyushu, so there will be a program set up in every region where the DoCoMo Group is represented. We plan to continue expanding the program until DoCoMo Woods is established in every prefecture throughout the country.

## Initiatives to Promote Environmental Communication

The NTT Group is committed to providing full public disclosure of its ongoing environmental protection activities through its website and pamphlets such as this report. We also endeavor to inform as many people as possible both inside and outside the company about NTT's environmental activities and positions through aggressive communication efforts including newspaper and magazine ads, environmental events, and other ways.

In a series of ads running in newspapers and magazines in 2003 we highlighted the beneficial effects of IT services for reducing the environmental load and the potential of IT for helping the global environment with the catch phrase "IT—the right solution for our future vision and the globe."

Disclosure of information and communication about the



Newspaper ads caught peoples' attention with the catch phrase "IT — the right solution for our future vision and the globe".

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Employees participated in tree planting, tree thinning, the maintenance of trails, and bench making in the DoCoMo Yamato Matsukura Woods, Miyagi Prefecture, October 2003.

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environment is further supported by websites and reports supported by NTT EAST, NTT WEST, and other group companies.

