



SCA Study

FORESTS FOR CHILDREN



*Conducted by
TNS Emnid on behalf of
SCA Hygiene Products*





DEAR READERS,



The United Nations has named 2011 the International Year of Forests. SCA is Europe's largest private forest owner, and wood is the company's most important natural resource. This makes sustainable forest management and preservation of the tree population essential elements of our corporate strategy. Sensible utilization of forests is important to our society, while also serving as the foundation for the future development of our company. This is why SCA is engaged within the framework of this United Nations initiative.

On the occasion of the International Year of Forests, we were interested first and foremost in learning how the coming generation views the issue of forests and nature. What do today's children know about forests? Do they see them as places to romp and play? And where do parents spend their leisure time with their children? Conducted by TNS Emnid, this study, "Forests for Children," supplies some answers that may be surprising but are definitely exciting.

I hope you'll enjoy reading it!

Yours,

Martina Eisenbeis,

*Environmental Manager,
SCA Hygiene Products SE*

Summary of findings

How does the coming generation view the issue of forests and nature? Within the framework of the International Year of Forests, SCA Hygiene Products wanted to know what today's children – the adults of tomorrow – know about forests. The vast majority of those surveyed indicate that they had already been in a forest at least once this year. So forests remain an interesting and exciting destination for experiences in the year 2011. Contrary to all preconceptions, the same also applies with respect to today's children, who are growing up with new technologies and regular media consumption. In fact, a major portion of them would even like to spend more time in the forest. Nevertheless, most of the surveyed parents rarely consider forests as a destination for experiences.

This representative study queried 1,000 children aged 7 to 14. The survey was conducted by research institution TNS Emnid between late September and mid October 2011.



These are the major findings:

- The outdoors are “in”: In response to the question of where the surveyed children spend most of their leisure time, 46 percent of the 7- to 9-year-olds answer “outdoors.” This response is also the one that is most frequently cited among the 10- to 12-year-olds as well as the 13- to 14-year-olds.
- Nine out of ten children have already been in a forest at least once in 2011..
- The desire to spend more time in the forest: In responding to the question of whether they would like to spend more time in forests, half of the surveyed children answer Yes. The breakdown: 59 percent of the 7- to 9-year-olds and 49 percent of the 13- to 14-year-olds would like to be in forests more often.
- Of those children who are not in forests often, 59 percent indicate that they find forests boring and, in fact, this percentage rises with age.
- The oak is the favorite tree of German children..
- A lack of knowledge about forests: 53 percent of the responses to the question of “Who is Master Lamp?” (a common term for rabbit in Germany) are wrong.
- Parents spend only little time in the forest with their children: Only 2 percent of the parents of 13- to 14-year-olds choose the forest as a leisure destination.

The SCA “Forests for Children” study proves that many children harbor untapped potential for wanting to go to forests and making the discoveries they offer. Given this central realization, children and teachers, as well as communities and institutions, can actively foster children’s desire to discover forests as a place of nature, learning and experiencing. Taken together, all this is thus helping to preserve forests as an irreplaceable natural resource and cultural heritage.

Pizza and PC versus nature and forests?

What come to mind in thinking about our children’s favorite leisure activity are images from German commercial television channels: Children and youths sitting in their rooms, consuming fast food and staring at either a TV or computer screen.

The SCA “Forests for Children” study proves the exact opposite. In responding to the question of where the surveyed children spent most of their leisure time, 46 percent of the 7- to 9-year-olds answer “outdoors.” This is also the answer that both the 10- to 12-year-olds as well as the 13- to 14-year-olds, too, cite most frequently. Nevertheless, only 16 percent indicate “nature and forests” as being their most frequent leisure destination. As they grow older, the time they spend in front of the computer increases: While only 5 percent of the 10- to 12-year-olds answer “at the computer,” the number jumps to 14 percent among the 13- to 14-year-olds.



Source: SCA Study “Forests for Children” / TNS Emnid

Spending their leisure time in the fresh air is what’s wanted

In contrast to the predominating opinion that children spend most of their leisure time with computer games and television, the SCA study proves that most children prefer fresh-air activities. Yet nature, itself, or even forests as a destination for experiencing, play only a minor role in this connection. It is also noteworthy that interest in forests tends to decline with rising age.

Last visit to a forest

“When was the last time you were in a forest?” This question supplies clear responses: Around nine out of every ten children had been in a forest at least once during the International Year of Forests. Only 1 percent of all those surveyed are unable to respond to this question, 88 percent of them answer “this year.” In fact, 92 percent of the 10- to 12-year-olds and 93 percent of the high school students give the same answer. Only 11 percent of all children indicate that their last visit to a forest was some time ago.

So the issue of forest education would still appear to play a relatively major role, especially for high-schoolers, as suggested by the study’s high numbers.



Source: SCA Study "Forests for Children" / TNS Emnid

Real life – The forest as an adventure playground

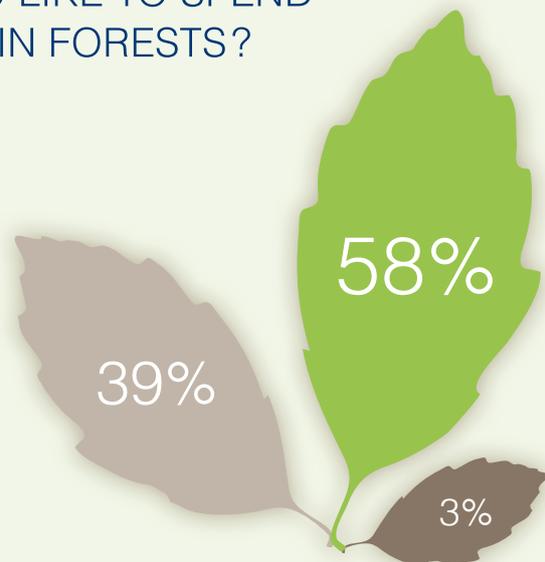
The forest has always been a mystical place in German cultural history, full of secrets, the setting for ancient sagas and fairy tales and, most of all, a piece of nature that can be experienced. In contrast to all preconceptions, this would even appear to apply to today’s children, who have actually grown up with new technologies and regular media consumption since babyhood. In spite of the Internet, television and video gaming, the survey shows that the forest still continues to be an interesting place for children in the year 2011.

In response to the question of whether they would like to spend more time in forests, over half of the surveyed children respond Yes. Conspicuously, forests are especially interesting to younger children. 59 percent of the 7- to 9-year-olds and 49 percent of the 13- to 14-year-olds would like to be in forests more often. One reason could be that forests and nature play a major role in child-rearing at home and in daycare centers and schools. And our story-telling culture would be inconceivable without the forest. Hansel and Gretel, Little Red Ridding Hood and Snow White have tales to tell about it. The reasons the surveyed children indicate for wanting to spend more time in forests include playing with friends, nature-watching and the fact that it's "so tranquil" in the forest.



WOULD YOU LIKE TO SPEND MORE TIME IN FORESTS?

- Yes
- No
- Don't know



Source: SCA Study "Forests for Children" / TNS Emnid

The forest as a place for recreation

Ulrich Gebhard, Professor of Educational Science at the University of Hamburg:

"The forest often symbolizes "naturalness," and is associated with well-being and recreation. As a prototype of "Nature," it thus stands for tranquility, freedom and beauty, and is associated with liveliness, relaxation, relief and satisfaction. It thus produces a feeling of well-being and helps us recover from stress."

It is noteworthy that the motivation of nature-watching is significantly less pronounced with the onset of puberty than among smaller children.

No forest nearby?

Among those children who say they do not like to be in forests, 59 percent indicate that they think forests are boring, and this percentage increases with age. Nevertheless, over one quarter of these children (26 percent) say there is no forest in their vicinity. Parental prohibitions play a role for only a minority: 16 percent of those children who do not want to be in forests frequently (5 percent among the 13- to 14-year-olds) do not have permission to go to forests alone.

What many children want thus coincides with the recommendations of such experts as Ulrich Gebhard, Professor of Educational Science at the University of Hamburg. In his book "Child and Nature, The Importance of Nature in Mental Development," he indicates the importance of the role that experiencing nature plays in the development of children, linking theoretical assumptions with empirical findings in this connection.

WHY DON'T YOU WANT TO SPEND MORE TIME IN FORESTS?

59% It's boring there

27% It's dark

26% There's no forest nearby

21% Forests are scary

16% I'm not allowed to go there

14% Other

10% Don't know, no response

Source: SCA Study "Forests for Children" / TNS Emnid

It's safer to play in nature than at playgrounds

Ulrich Gebhard, Professor of Educational Science at the University of Hamburg:

“Your own garden is naturally a wonderful opportunity for offering children experiences in nature. However: What’s more important than bringing nature to the home is letting children enjoy nature on their own, even if this is sometimes difficult. The fear that something could happen often holds us back. But just to calm your concerns, it should be noted here that fewer accidents occur while playing in the worlds of experiences that are offered by nature than at officially-sanctioned playgrounds. It would seem that playing on their own in nature gives children an opportunity to exercise responsible behavior. This, too, numbers among the social learning effects that are offered by experiences in nature.”

The oak tree – The favorite of children in Germany

Oak trees grow to heights of 20 to 50 meters, bear spreading, gnarled branches and can live to ages of well over 1,000 years. They grow in forests, along rural byways and in many parks. Their leaves and fruit (acorns) make these trees immediately recognizable, even to children. Oak trees symbolize strength and power. And: They are the favorite tree of German children. 19 percent rank oaks first when asked about their favorite tree. Oak trees are closely followed by chestnut trees, which are cited in 16 percent of all cases. Boys and girls have different assessments: The chestnut tree is the number one among girls, the oak among boys.



German children's top ten favorite trees

1. Oak
2. Chestnut
3. Birch
Fir
Apple
6. Beech
7. Cherry
Maple
9. Nut/Walnut/Hazelnut
10. Linden

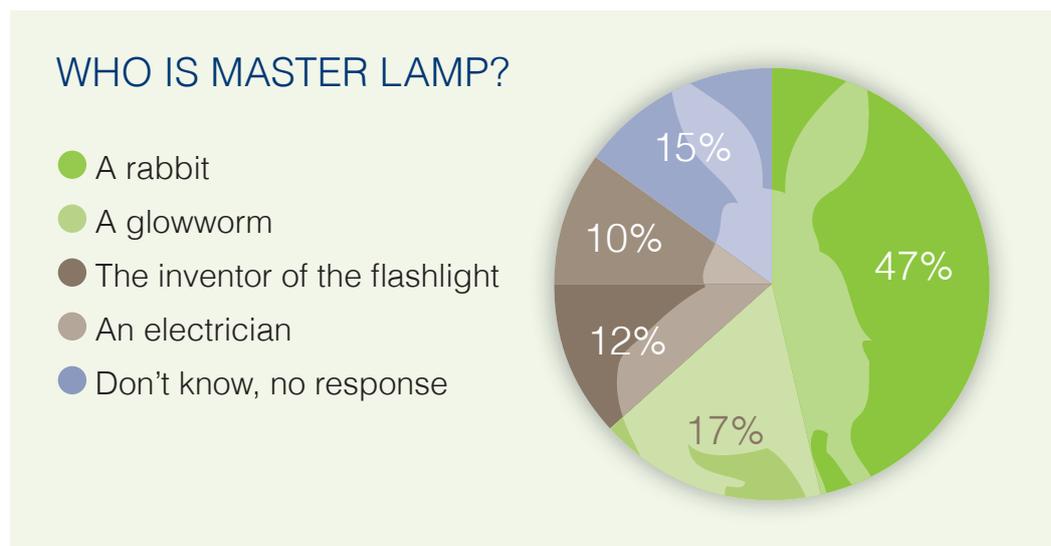
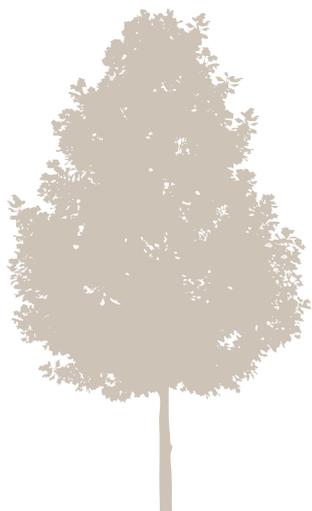


Source: SCA Study "Forests for Children" / TNS Emnid

Forest knowledge – who is Master Lamp?

As a complex ecosystem, the forest is home to any number of creatures. Up to 240 different species of birds can be found in German forests, for example, and fox, deer, badger & Co. likely number among the most well-known ground-living forest animals. They also include the wild rabbit, who as “Meister Lampe” (literally “Master Lamp”) was the hero of numerous German fables.

But today, far from all German children even know who Master Lamp is. 53 percent of the responses to the question “Who is Master Lamp?” are wrong. While 15 percent of the children can not even cite an answer, 15 percent of grade-schoolers think he is an electrician, and 16 percent of high-schoolers think he is a glowworm. 17 percent of middle-schoolers think Master Lamp is the inventor of the flashlight. Just as forests tend to play a lesser role today as places where children can experience, the study shows that children have only limited knowledge about the creatures that live in the forest.



Source: SCA Study “Forests for Children” / TNS Emnid

Fact and fiction – Do chipmunks live in German forests?

Almost everyone is familiar with it – wild boar, the favorite food of the Gallic villagers in the Asterix comic series. But only few know that newborn wild boar are called shoats. When asked which creature lives in the forest, only 56 percent of the children queried know the answer. When asked about creatures that live in the forest, children aged 7 to 12, in particular, cite “Chip and Dale.” And one tenth of all surveyed children think leprechauns live in the forest. An equal number of children can not even provide an answer to the question.

WHICH CREATURE LIVES IN THE FOREST?



Source: SCA Study "Forests for Children" / TNS Emnid



The mission – Spending more time in the forest with mama and papa

The outdoors and sports are clearly on the agenda. This is demonstrated by the SCA study, which asked parents how they spend leisure time with their children. 81 percent indicate undifferentiated athletic activities. 61 percent cite outings, and 49 percent of the parents of grade-school children play with their children in their leisure time. This also includes activities in the garden, although they account for only 11 percent. It is noteworthy that the number of responses pertaining to activities in the forest is low at only 5 percent – even though the numbers for outdoor activities are high. Only 2 percent of the parents of 13- to 14-year-olds choose the forest as a leisure destination. As enthusiastic as they may be about sports and outdoor activities, it is interesting to note that only a small percentage of the parents surveyed spend their leisure time in the forest with their children. In addition to a lack of opportunities that would make forests an attractive nearby recreational destination, the reason why is that might be that more and more parents simply do not know enough about this subject. Forest nature trails and informational programs for parents could better this situation.



WHAT DO YOU DO WITH YOUR CHILDREN IN YOUR LEISURE TIME?



Source: SCA Study "Forests for Children" / TNS Emnid

Fostering creativity and self-direction

Ulrich Gebhard, Professor of Educational Science at the University of Hamburg:

"Experiences in nature have a positive effect on concentration. Forest walks have been the subject of numerous studies in this regard. And similar reports also come from forest daycare facilities. Moreover, it can be seen that the way children play in so-called "experience nature" areas is more complex, creative and self-directed. The wide variety of shapes, materials and colors sparks their imagination to come to grips with the world and their own selves."

About SCA and the International Year of Forests

There are many reasons why SCA is engaged in the International Year of Forests. SCA's huge forestlands in northern Sweden are managed in accordance with true long-term perspectives. Over the course of the past 50 years, the mature tree population has risen by 40 percent and the growth rate has more than doubled. However sustainable wood production is only one of our goals. We manage our forests with the objective of protecting biodiversity. We want our forests to be at least as rich in wood in the future as they are today and to preserve the beauty of nature.

Responsible utilization of raw materials

One of SCA's primary environmental goals is to assure that no wood fiber from questionable sources is used. This is why SCA manages its own forest – from which around half of the wood it processes is obtained – in accordance with the Forest Stewardship Council (FSC) forest certification system. Moreover, we regularly conduct assessments of our raw materials suppliers in order to assure that we are utilizing only raw materials produced through responsible forest management.

Significant use of recycled paper

Around 50 percent of the wood fiber that we use has been recycled. In fact, SCA is Europe's largest collector and user of recycled paper. Recycling enables us to use the fiber repeatedly, and thus more efficiently, for our products and services.

Life Cycle Assessment

Since the early 1990s, SCA has been operating under the Life Cycle Assessment (LCA) concept. LCA includes a complete, environmentally-based assessment of the entire value chain (beginning with the raw material and continuing on through production and shipping of the finished product right through to its utilization and disposal) and is a firm element of the product development process at SCA. We utilize LCA as an aid in identifying how we can optimize our product development efforts in order to keep environmental impact to a minimum. One way we do this is by studying our resource inputs throughout the value chain. Can we choose more efficient raw materials with a view to function and environmental impact? Are there perhaps new raw materials that have less impact on the environment? Can we reduce the energy needed in the production process and/or switch to better sources of energy? Over the course of the past 20 years, more highly absorbent materials have allowed us to produce thinner hygiene products. This has enabled significant environmental improvements to be achieved.

Measurements are the key to success

Although defining ambitious environmental goals is the first important step, the results have to be tracked and analyzed in order to be credible. These measurements necessitate a comprehensive system for the capture, analysis and presentation of the environmental data. We at SCA have already been employing a Resource Management System, or RMS for short, since the 1990s in order to monitor the way we use energy, water, shipping and raw materials. We utilize the findings that we obtain for internal control purposes and, if necessary, to reorient the employment of resources where it is necessary for us to improve our performance. Precise, rigorous measurements enable us to focus on the facts and identify the real results that our environmental initiatives are producing. And we are pleased to pass on this information to outside special interest groups.

Features of our environmental responsibility

The leading role that SCA plays in protecting the environment is widely recognized. Its visible manifestation consists of the certification of our products and production operations by leading environmental organizations and government agencies. Examples include:

- Within the framework of ISO 14001, the International Standards Organization (ISO) publishes standards that define the requirements placed upon an environmental management system. All of SCA's European cellulose and papermaking facilities and most of its production facilities worldwide are certified under ISO 14001.
- EMAS – Eco-Management and Audit Scheme, the European Union's common system for environmental management and environmental auditing.
- The EU Flower – an initiative of the EU to foster sustainability in a “system of integrated, lifecycle-based product policy.” The purpose of the EU environmental symbol is to stimulate demand for those products that have a lower impact on the environment.
- Blue Angel – Germany's trailblazing eco label and the world's first environmental symbol.

Inclusion in the Dow Jones Sustainability Europe Index

In 2011, SCA was included in the Dow Jones Sustainability Europe Index. This makes SCA one of five Swedish companies to be represented in this index. All of the companies in the index are assessed on the basis of strict economic, ecological and social guidelines in order to assure that the high standards required for inclusion in the index are maintained.

Tree Pool: Employee tree-planting campaign

The people of SCA, too, are engaged in this International Year of Forests and showing their solidarity with forests. Within the framework of a pan-European Tree Pool, they are working together with private- and public-sector organizations, such as daycare facilities and schools, to plant trees in the cities and towns in which they live, thus giving back to their communities a piece of nature.

About the “Forests for Children” study method

The SCA “Forests for Children” study is based upon a representative survey in which 1,000 children aged 7 to 14 and their parents were selected and queried by means of a random sampling process. Parents and children were interviewed by means of a questionnaire containing eleven questions, with one of the questions directed specifically at the parents. The study was conducted by research institution TNS Emnid.



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