EVERYBODY KNOWS WE ‘DRINK’ WATER. WELL, DO WE?
(And I don’t mean sucking on an ice-cube)

Most of us might not know that our food, products and energy indirectly makes for a substantial 96% of our daily water usage. Termed as Virtual Water, it is measured over the whole supply chain of a product.

Take beef as an example. In the average three years needed to raise a cow, water consumed by the cow and water used to maintain the entire process from rearing to slaughtering the cow, leads to an average of 15,400 litres of water to produce just 1kg of beef! Fruits and vegetables on the other hand, are considerably more water-friendly, with 1kg of barley requiring only 10% of the water that beef uses.

With rapid population growth, food and energy demands are expected to surge by 50% and 60% respectively as of 2030, intensifying the use of water. With this strain on the supply of freshwater resources worldwide, it is important to acknowledge Virtual Water as the substantial missing link in our bid to save water.
Consumption behaviour can play an enormous role in reducing Virtual Water usage. Just last year, Singapore generated 785,000 tonnes of food waste. That is equivalent to two bowls of food per person each day, and wasted food means wasted water. With Singapore importing more than 90% of her food, it is important that we do our part and ensure sustainable food security.

There are many ways to help conserve precious water resources. Remembering the rule of supply and demand, try eating less meat or going on a vegetarian diet once a week. Drink tea instead of coffee, or choose artificial fibre over cotton clothes.

Singapore International Water Week took place on 10 to 14 July. And while it is always good to turn off that tap, and not hose the car, it will be just as good not to be ‘penny wise, pound foolish’ and think of the thousands of litres of water used in the food we eat and the products we use every single day.

Now, where is this salad bar everyone is talking about?

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### Guess How Much Virtual Water These Products Use?

<table>
<thead>
<tr>
<th>Item</th>
<th>Virtual Water Use (litres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Cup of Coffee</td>
<td>140</td>
</tr>
<tr>
<td>1 Kg of Cabbage</td>
<td>240</td>
</tr>
<tr>
<td>1 Cotton Shirt</td>
<td>2500</td>
</tr>
<tr>
<td>1 Pair of Leather Shoes</td>
<td>8000</td>
</tr>
<tr>
<td>1 Kg of Beef</td>
<td>15400</td>
</tr>
</tbody>
</table>
EMPOWERING MY CHILDREN THROUGH NATURE

By Sawako Barberon, Earth Helper

Going on a walk in one of the 300 parks in Singapore is good for your mind, body and soul! This was one of the many unexpected side-effects experienced after I signed up as an SEC Earth Helper. Initially, I had just wanted to lend a hand in developing awareness in our environment, perhaps through some recycling or cleaning programs, but by being an Earth Helper, I got to know many like-minded friends whom I feel so blessed to have come across.

Since I started facilitating biodiversity trails with SEC, it has only gotten more exciting each time, to spot the different species of flora and fauna, resulting in an increased admiration of nature. When I introduce my children to nature, I can see pure joy and marvel in their eyes as they come up close with all these living creatures and plants. Understanding their responsibility as a citizen comes naturally thereafter, leading to the habit of recycling, saving energy and water.

As a family, we cherish more than anything, our weekend outdoor activities like cycling in Pulau Ubin. We also enjoy volunteering together, as it is a great bonding opportunity while cultivating values in our children. The feel-good nature of serving a good cause has no doubt contributed to the absence of grumpy teenagers at home, and it’s all thanks to their eco-friendly volunteering spirit!

Being eco-friendly is EASY, FUN and will make both you and your family HAPPY!
DID YOU KNOW?

- Singapore retains only 2.5% of our original rainforest, with 50% of our remaining native biodiversity residing within.
- Our island is estimated to have 40,000 non-microbial plants and animal species.
- Our rainforest contains more species of trees than the whole of Europe and North America combined!

Come join us and be amazed at the rich flora and fauna which are valuable to our eco-system and should be conserved.

Check out the fun we had in May, through our collaboration with Sentosa Development Corporation and North West Community Development Council.

CHECKING OUT THE MULTI-PURPOSE NIBONG PALM AT SENTOSA

“The facilitators were very knowledgeable and humorous. The entire experience was brilliantly organised!”
~ Ms Zhou Silyang, teacher, West Spring Secondary School

SMILE! AT SINGAPORE QUARRY

“As Singapore progresses, we must not neglect the importance of biodiversity appreciation in our lives. The North West Eco Trails will help residents connect to nature easily within North West District, reminding all Singaporeans that the roots of our island state will always remain embedded in the tranquillity of our unique flora and fauna.”
~ Dr Teo Ho Pin, Mayor of North West District

Photo credit: North West Community Development Council

The oriental-pied hornbill was not spotted in Singapore for decades due to habitat loss, but has since been successfully reintroduced.

Photo Credit: Alyce Ang

GO WILD continued on Page 5
With more than 10 trails to explore, just pick one and let us do the rest. You’ll be guaranteed a fantastic experience that’s unique, informative and educational!

Email us at biodiversity@sec.org.sg to find out more.

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CITIES OF LOVE

Love our city for a better living.

Green consumerism has evolved to become a modern and ideal lifestyle. Experience an eco-friendly lifestyle at Green Living where you can learn from green champions. Get a glimpse of how life may be like in a greener and more sustainable Singapore, the city you live in and love.
5 TIPS TO LIGHTEN YOUR PET’S CARBON PAWPRINT

By Dagna Choo, Executive Assistant (Environmental Outreach)

If you are a pet owner like I am, caring for our little fur-ball can be a pampering affair. As we shower all that love, caring for the environment and conserving natural resources can sometimes be just an afterthought. Here are some tips I practise to sustain a happy pet, while maintaining a happy Earth relationship!

1. TRICK OR TREAT?
The convenience of Ziploc bags for holding treats and snacks is hard to resist. Unfortunately, many of these plastics (at least 5.25 trillion of them) end up being disposed improperly. Prevent all that from happening and use an airtight container instead.

2. CLEARING THE POOP
Use old newspapers or any form of scrap papers instead of plastic bags. Reducing the overall use and disposal of plastics contribute greatly to a healthy environment for us and the animals.

3. GETTING CLEAN
Avoid single-use wet wipes. They require a longer time to decompose, and are notorious for choking sewage systems. Use towels, they can be washed and reused as and when you need them.

4. HITTING THE SNOOZE BUTTON
Upcycle your old pillow cases and transform it into a personalised bed by adding a bag of cotton balls or even beans! It’s priceless to see your pet curl up to something made with so much effort and love!

5. GETTING THE SHINNIEST AND SOFTEST FUR IN TOWN!
Why buy two bottles when you can have it all in one? That 2-in-1 shampoo and conditioner not only saves the environment, but your money and time! What’s more, I’ve found out that it works perfectly well, especially for those who prefer to spend more time playing than showering.
URBAN FARMING IN THE HEARTLANDS

GOODNESS GRACIOUS ME!
By Alex Ng, Professional Baker

I grew up in rural Mandai where climbing trees and harvesting fruits were a past time. Call it an innate instinct but when I moved into a HDB flat in Yishun, I could not resist the temptation to grow my own fruits. What began as a trip to the nursery to buy some Mulberry plant subsequently developed to include others like the Japanese Kumquat, Mint, Pandan, and of course, Grapes. I’ve tried to grow vegetables but they did not do well due to insufficient sunlight.

It has been seven years since I first started growing grapes in my flat, and it still tickles me when friends ask if they are edible or real! Apart from grapes, it is possible to grow Jambu, Pomegranate, Pomelo and even Banana in a pot, if you have sufficient space and sunlight. It is easy to find grafted or marcotted fruit trees in nurseries these days.

Indeed, most people would be surprised to know that HDB corridors are quite suitable for growing fruits. Do some research to ascertain their suitability given the conditions so as to avoid disappointment. Social media is a great platform to gather and exchange gardening tips. In fact, we inspire each other with our progress and success. Join some of the horticulture and gardening groups like Plant Community Singapore, Urban Farmers (Singapore), Green Culture Singapore, and you will find a wealth of experience and information!