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Fagus sylvatica (European Greenleaf Beech) ID #1051

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Sophie Beauchesne

April 24, 2020

Bio 140: Humans and their Environment Lab

Salve Regina University Arboretum

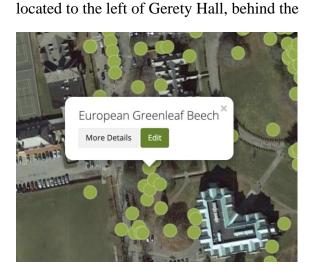


European Greenleaf Beech

Fagus sylvatica

ID #1051

During my time in Dr. Chace's BIO 140: Humans and their Environment lab, I have been observing one of the many spectacular trees that is part of Salve Regina University's arboretum. The tree that I have been studying is a European Greenleaf Beech (*Fagus sylvatica*). This tree is





garden. The tree
can be identified
by its ID tag
which reads
#1051. Salve
Regina has
1,200 trees of
over 100

different species in its arboretum. The Morton Arboretum ArbNet Arboretum Accreditation Program has named Salve Regina a Level II arboretum.

I identified my tree with the help of the Rhode Island Tree Register and by personal observation. My tree is a European Greenleaf Beech. Its scientific name is Fagus sylvatica. The tree stands at a height of 8 meters or about 26 feet, with a breast diameter of 76.3 cm. The European Greenleaf is native to central Europe and was brought over to the United States in the 1700s. It is found in several New England states including Rhode Island. The European beech tree is known for its beautiful appearance and low hanging branches. Its bark is smooth and grey and is described as resembling elephant skin. The beech tree is found in anthropogenic habitats (man-made, like our campus). It can also be found occurring naturally in forests or the edge of forests. This tree is also deciduous, meaning it losses it's leaves in the fall. In this picture captured March 3rd of this year shows this tree in its winter state, without leaves. Once the



weather gets warmer, this tree with start to produce buds, so that new leaves can form. These buds are light brown and have pointed ends. In late spring, as leaf shoots begin to appear, the tree has greenish brown colored blossoms. In September the European beech produces a fruit, called a beech nut. These beech nuts are cased in a spikey brown shell. Beech nuts supply food for organisms such as squirrels and chipmunks. Humans can consume beech nuts, but it is advised that they are consumed in low quantities.

Beech nuts contain toxins called tannins, which can be harmful in large amounts.

After observing my tree I noticed that it was covered in white patches all over the bark. I was curious about what exactly this was on my tree, so I conducted some background research. I have concluded that these white patches are most likely lichens. Lichens are both fungi and algae. Both fungi and algae form a symbiotic relationship where algae provides energy through photosynthesis to the fungi and the fungi gives the algae a place to live. Lichens are very common and do not harm the tree. There are many different species of lichen so it was difficult to identify the exact lichen growing on my tree. After looking at many pictures of lichens, it is possible that this lichen is White Crustose lichen. Crustose lichens are crust like lichens that

form tightly to tree bark and rocks.

After learning about this tree all semester, I have gained an appreciation for the beauty of the beech tree. This excerpt from a poem titled *The Beech Tree* by Edith Nesbit encapsulates the true beauty and meaning of the beech tree.

"My beautiful beech, I carve upon you here
The master-letter which begins her name
Through whom, to me, the royal summer came,
And nightingale and rose, and all things dear.

And, in some far-off time,

I shall come here, weary and old,

When the hearth in my heart is cold

And the birds that nest there flown;

I will remember this summer in all its prime"

It is easy to take for granted the beautiful views we get to see every day on campus. Over the course of this project I have gained appreciation for the wonderful trees that live on our campus.

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