A student's experience at





About the company

- Treeconomics is a social enterprise comprised of a small team based in the Exeter area.
- We provide sustainable management of urban forests, with projects highlighting the values of trees.
- We work internationally with community groups, research organisations, public bodies, municipalities and private businesses to apply commercial strategies that improve human and environmental wellbeing (Treeconomics, 2021).



Our Mission

Treeconomics aim to create sustainable treescapes for everyone and to demonstrate that trees are the solution to many of our urban problems (Treeconomics, 2021).

This is achieved by offering a range of services such as:

- Tree Inventories (Understand and value existing trees)
- Canopy Surveys (Measure % canopy cover and where to plant)
- City Surveys (Surveys from borough size to city size)
- Tree Plant Strategies (Use GIS to map hotspots for tree planting)
- Urban Forest Webmaps (Publicly available webmap of benefits)
- Urban Forest Masterplans (Detailed strategic management plan)



Our Research

We use a range of research methods but primarily the i-Tree Eco model (first used in the UK by Treeconomics in Torbay) (Rogers et al, 2011), which is now widely used in urban forestry. This tool was developed by the United States Forestry Survey (USFS) and analyses the urban forest structure to provide estimates of ecosystem services provided by trees (Riondato et al, 2020). These include carbon storage and sequestration, air pollution removal, and storm water attenuation.

My Role as a Natural Resources Intern

- Although my role has been varied, I have mainly worked on i-Tree Eco inventory projects. For this I have been using collected data, running it through i-Tree, and then doing some calculations on the output data which goes into our reports.
- I have also been working on designing and adding data to tree tags for Barcham Trees (the largest tree nursery in Europe). These tags allow for easy comparison of carbon storage over a lifetime between different species and varieties, so will be really useful for decision making when buying trees.
- On top of this I have done some marketing tasks, including research on information to go in some short articles for a magazine. I also get to research and create Friday Facts, such as that shown in Figure 1, and add them to our social media.



FRIDAY FACT

The rainbow eucalyptus is the only eucalyptus tree that is indigenous to the northern hemisphere and its most noticeable feature is its bark.

When the previous season's bark peels off it reveals brightly coloured new bark below.

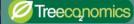


Figure 1: Example of a Friday Fact, Source: (Carroll, 2020)

How my role fits into the overall structure of the company

- As one of only six people there is definitely a feeling of togetherness, and teamwork is a regular feature. So far I have worked with everyone in our team, and who I work with depends on the project being worked on. Although I am working remotely, training has not been too much of an issue because of Skype screen sharing.
- The small team environment allows me to be heavily involved in projects. With this comes praise and recognition when things go well that may not come from a larger organisation. If there are any problems support is always given quickly, with wellbeing often spoken about in team meetings and everyone is easily contactable.



Figure 2: The Bosco Vertical: A high rise apartment block, Milan, Source: (Bioneers, 2021)

Why I recommend Treeconomics to other Exeter Geography students

- Skills learnt from Geography can be applied to a professional environment such as: report writing, analytical skills, data file management, GIS, and teamwork.
- I also plan to do a dissertation focused on carbon storage in trees, so this is a really useful experience for me and a chance to gain subject and industry knowledge.
- There are also opportunities to learn about related topics such as green infrastructure. Figure 2 shows a residential block in Milan I learnt about, and demonstrates how an urban area can be transformed by trees (Less and Domzalski, 2018).

References:

Student: James Chaplin



Bioneers (2021): Available at: https://bioneers.org/elevating-nature-milans-bosco-verticale-zp0z1806/ [online] Carroll (2020): Can you grow a Rainbow Eucalyptus free, Available at: https://www.gardeningknowhow.com/ornamental/trees/eucalyptus/frainbow-eucalyptus-tree.htm [online] (Accessed, 20/01/21)
Less, E. and Domzalski, M.A., 2018. Bosco Verticale's Social Ecology. Riondato et al, 2020 Investigating the effect of trees on urban quality in Dublin by combining air monitoring with i-Tree Eco model. Sustainable Cities and Society, 61, p.102356.Rogers et al. 2011. Torbay's urban forest: Assessing urban forest effects and values. Treeconomics Treeconomics