The ecological footprint is an indicator that measures the size of the bioproductive land needed to provide resources and disposal of waste from existing technologies. It's an important sign of the sustainability of the population on Earth. As we are currently facing an impending lack of many natural resources, this is an important issue. The biomass we use is created by plants, which play a critical role not only in functioning of the ecosystems, but in the concept of the ecological footprint. Individual types of vegetation differ in their relative contribution the overall ecosystems production and consequently to the calculation of the ecological footprint of various lands. For this reason this work is concerned not only with the concept of the ecological footprint, but also with the services that plants provide. The objective of this work is to compile the current information on the evolution of the concept of the ecological footprint, what preceded its creation, and to focus on the important role of plants in the functioning of ecosystems, allowing for the calculation of the ecological footprint. The evolution of the concept of the ecological footprint is covered in Chapter 1. Chapter 2 deals with ecosystem services, their rating, and the critical role that plants play in them. The calculation of the ecological footprint is detailed in Chapter 3. How amounts of created biomass differ and what influence they have on the calculation of the ecological footprint is discussed in Chapter 4. The conclusion discusses sustainable development, as this concept is closely linked with the ecological footprint, especially in relation to the long-term consequences of the decisions made by the human population. The importance of plants in the concept of the ecological footprint is irreplaceable and it's necessary to further study the physiology and function of plants in ecosystems, particularly in the current era of climate change, so that we may better evaluate and utilize what plants can provide.