Building trees (IV)

The construction process is the key to customizing our trees, because each tree is a unique construction that can take many forms.

Text and pictures by Legotron

We have seen in previous articles the systematic construction of trees. But really, when we build our own tree and customize to our liking, what process should we follow? Basically, building a tree is like building a house: it lies on rising gradually until finish. In the case of the tree construction process is simplified by the fact of not having to follow any rule when building it. The branches should not have symmetry, or a certain length, or the distribution of the leaves doesn´t have to be completely uniform.

The best way to see how easy to build a personalized tree is, is to be guided by an example, which will build a tree of medium size, such as an oak tree, full of foliage and branches. To simplify the example, the tree wouldn´t be very big, with a brown trunk and leaves that represent the usual green "plant leaves".

Necessary bricks.

The bricks needed were determined by its availability at the time of construction, which included the following pieces, according to Bricklink´s label´s [1]:

For the base:

- 2 green plates 12x6.
- 15 green plant flower stem.
- 6 plant flower stem 1 x 1 x 2 / 3 with 3 large leaves.

For the trunk, with a 20 bricks height:

- Approximately 10 brown bricks 1x1.
- About 10-15 brown bricks 2x2.
- About 10-15 brown bricks 2x2 corner.
- About 10 modified bricks 1 x 1 with headlight to simulate the hollows and holes in the bark.
- Between 2 and 4 brown arch bricks 1x5x4 for trunk´s forks.
- Between 2 and 4 curved slopes 6x1 inverted to support the main branches
- About 15 brown plates 1x2, 2x2 corner and 1x3 for secondary branches.
- Approximately 10 brown plates 1x4 and 1x6 in sum

for the branches.
- Some brown plates 2x2 to strengthen the trunk.
- About 15 brown hinge plates 1 x 2 locking with 1 finger on end and brown hinge plates 1 x 2 locking with 1 finger on side in total, for the joints of the branches.
- About 15 brown hinge plates 1 x 2 locking with 2 fingers on end for the joints of the branches.
- A dozen slopes 33 3x1, 45 2x1 and 75 2x1x3 in total, for the union of the trunk with the roots.
- 5-10 brown slopes inverted 75 2x1x3 brown.
- About 15 slopes 30 1x1x2/3 brown, to fill the joints of the branches.

To build the branches:

- Between 3 and 5 green plant leaves 5x6.
- Between 50 and 75 green plant leaves 4x3.
- Between 8 and 10 green plant sea grass green.

Construction.

As commented, for this article I had all my spare parts available to me, with the list showed above, so with this limit and a hazy idea of how I wanted the tree to be, I started the assembly. First, I started mounting the root zone on 2 plates 6x12, placing the different slopes in all directions, leaving a 4x4 studs square in the middle to build up the trunk. The process of building the trunk could be defined as a speed race, distributing randomly the different bricks,
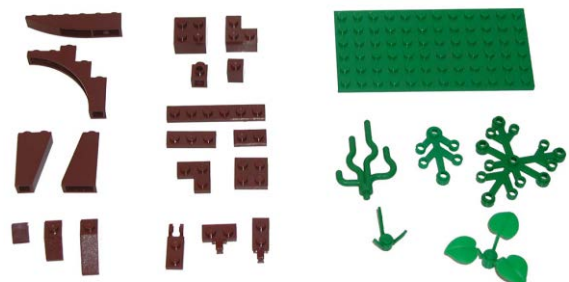
Diferent stages during construction

slopes and inverted slopes so they fill the gaps in the most irregular way up to a height of 8-9 bricks. Then we will fill the possible hollows with modified bricks 1 x 1 with headlight, to represent some holes in the trunk, and slopes 1x1x2/3 to smooth the girth. From this point up we will add the arch bricks 1x5x4 with the curved slopes 6 x 1 inverted to make two or three branch layers at different heights. It will be recommended to strengthen the trunk with this branches by means of plates, to avoid them from falling off when adding the secondary branches and leaves. The next step is to add some secondary branches, the closest ones to the trunk could be done by simply overlapping plates perpendicular to the main branches, and the more distant by using hinge plates, with a small tilting degree downwards to simulate bending under the weight of the leaves. This process, whose result can be seen in the photo of the finished trunk, can be done in just 5-10 minutes.

At first glance it may appear that the tree is not going to be very eye-catching, but we shall see that with a good leaves selection, it can look very spectacular. We began the process of laying the leaves by placing the plant leaves 4x3. First the inner leaves, the closest to the trunk, starting from below. As we climb, the leaves that do not have anything below them, we add son plant sea grass green, what will make the tree look more leafy and alive, as if they were lianas. We reserve the plant leaves 5x6 for the top of the tree in order to cover the whole trunk with them. Finally, we place all the leaves from the branches endings, trying to cover all tree areas to our liking. This last step must be done carefully, because the accumulation of branches could make the inner leaves will fall while adding the external ones. Finally we decorate the base with a few plant flower stem and plant flower stem 1x1x2/3 with 3 large leaves to give an appearance of a very lush forest.

As shown in the photos, the result is truly satisfying, and in just 20-25 minutes. We don´t need an exhaustive planification, just let the building to take shape. The parts of the tree that do not have the desired appearance can be covered with more leaves, simply distancing from the model and seeing the tree´s whole appereance. If we are not satisfied with it, we could always start from scratch, because in each new construction we will get a completely different tree.

References:
[1] Unofficial selling LEGO® parts online: http://www.bricklink.com ∎