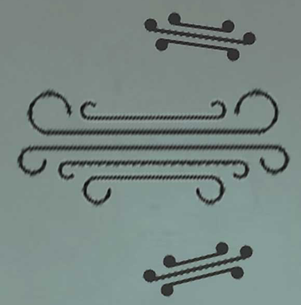
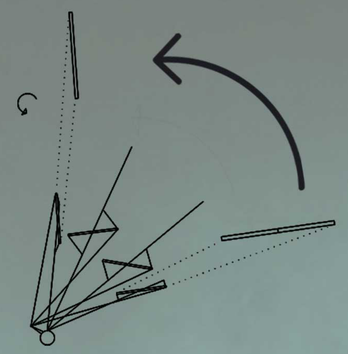
Design The Future Of Fly Ranch

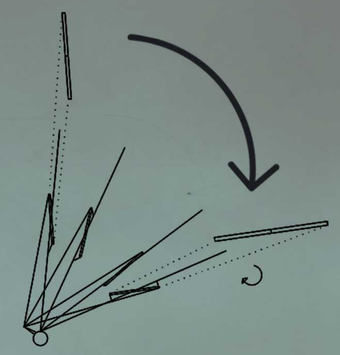
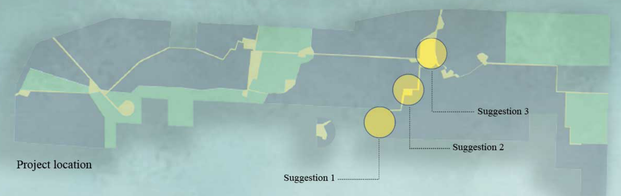
Baba Yaga in chains

Planet Earth according to Tesla, is a gigantic electrical Generator from which limitless energy can be harnessed using the right medium or shape. One of the tangible forms of this source of energy is the Infinite wind force.
The purpose of design is to use this powerful energy source without old fashioned turbine blades, which has caused death or serious injuries or many birds. The idea is to remove the rotation and replace it by a reciprocating motion inspired from waving leaves in the wind, flying birds or swimming aquatic creatures. Among the existing structures, the one that most closely resembles living organisms is the Tensegrity and combining tensegrity and deployable structures is a solution to move in a flow in a way that living organism do.
The simple act of folding is a technique in order to increase rigidity and take advantage of flexibility to create specific motions that can be stable in two positions.
Unlike the turbines in this combination, there is no need for cost. Simple materials such as wood, paper and rope can be used to build this structure. Also, these materials are all fully recyclable and very environmental-friendly. (Leave No Trace)
This flexible structure is resistant to storms and stays functional at any wind speed. Also, it can shrink like a Seashell and becomes aerodynamically resistant to storms and this shape can be used as a shelter for visitors.
In addition to beauty, constructing or even designing similar structures with this system by visitors of the site can be the reason for gatherings and interacting. In this way, participants can use what has been previously built, and what they build provides facilities for future users. (This is an unconditional gift-giving)





This simplified geometric figure shows the change in angle of the middle sticks as the structure goes up and down (using Compliant mechanisms)



The amplitude of the structure changes at low and high wind speeds with the stretching and moving center of the support cable