

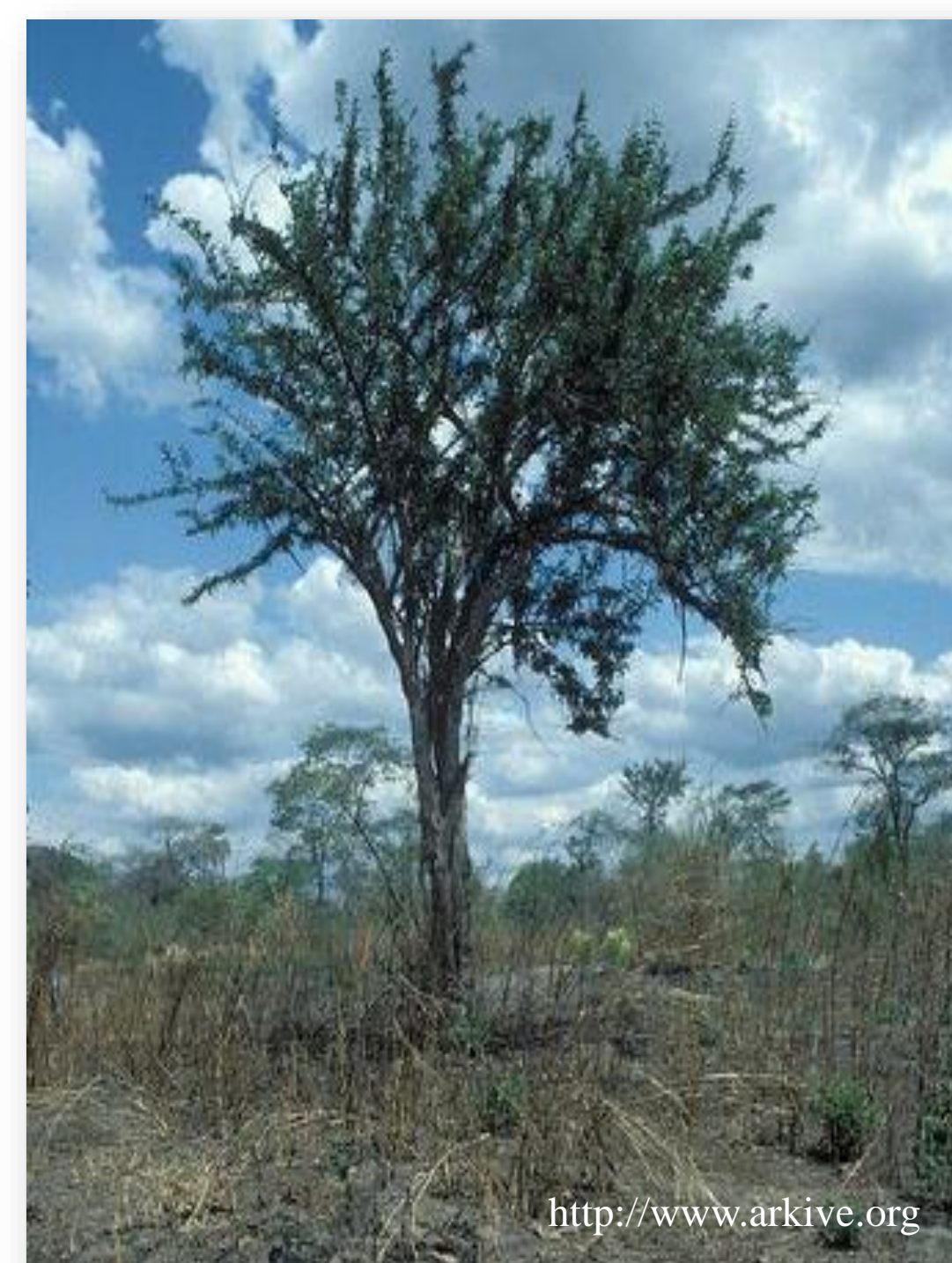
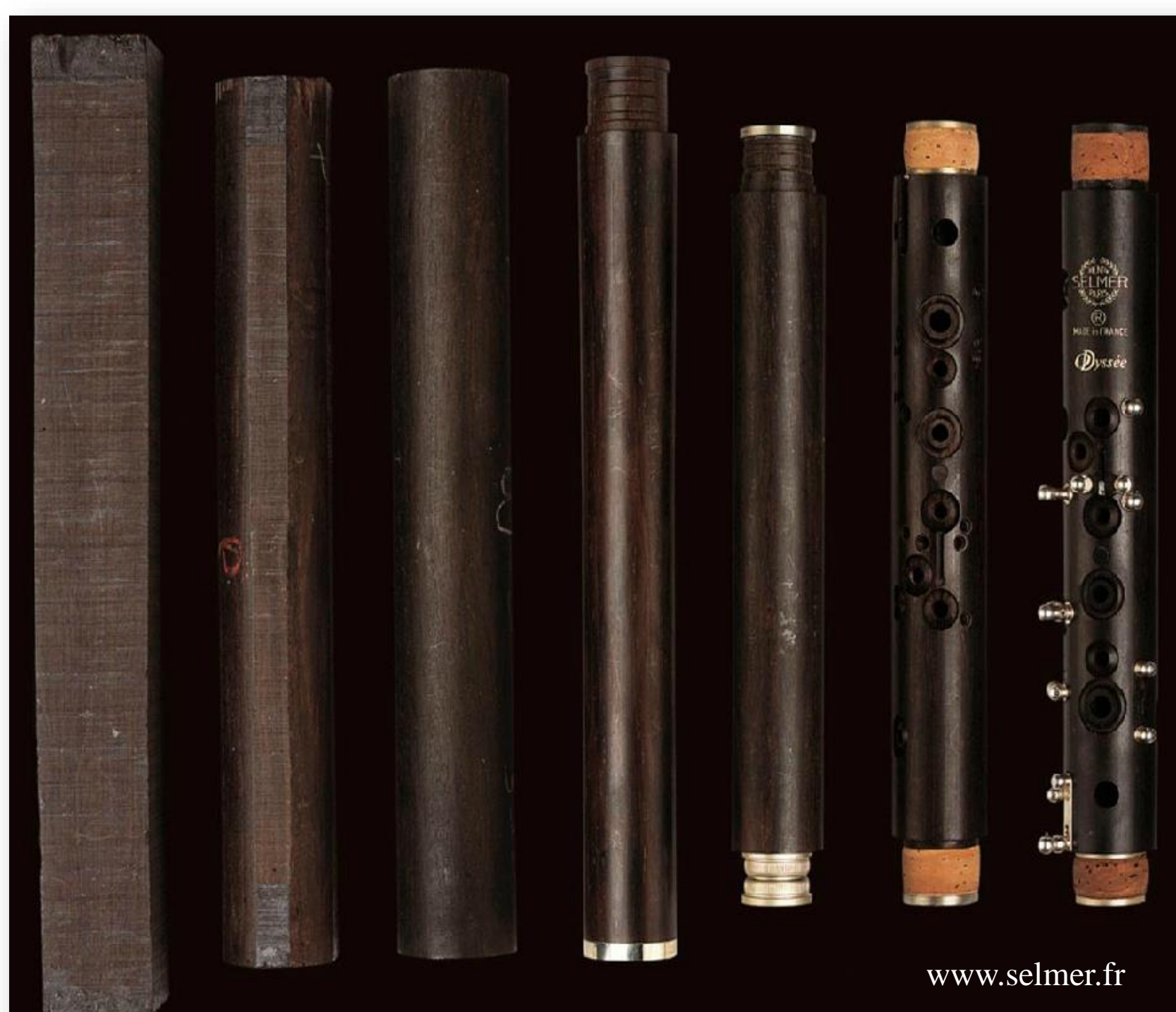
## INTRODUCTION

Clarinets are made with a variety of materials, such as plastic, graphite, porcelain, or even metal. However, the material mostly used to make clarinets is wood. African granadilla, *Dalbergia melanoxylon*, is the most popular and most widely used species to make clarinets today by leading world companies. This species is used also to make flutes, oboes, and bagpipes, which makes *Dalbergia melanoxylon* one of the most valuable plants in the world and the focus on a single species for this use puts lots of pressure on a limited resource. The quest for sustainable alternatives for the rare and endangered wood species used for the manufacturing of clarinets must take into account the physical, mechanical and aesthetic properties of the replacement, but also the readiness of the musical community to accept it.

## OBJECTIVE:

The objectives of this study are:

- To determine physical and mechanical properties of *Dalbergia melanoxylon* relevant for the use of the species in clarinet manufacturing.
- To determine the characteristics of the Clarinets that musicians and companies believe that contributes to value.
- To determine species of similar characteristics but more common and not endangered or protected, and therefore viable and sustainable alternatives to *Dalbergia melanoxylon* in clarinets manufacturing.



## RESULTS

Scientific Name	Class.	Scientific Name	Class.
<i>Buxus sempervirens</i>	P-NE	<i>Dalbergia oliveri</i>	C-EN
<i>Prunus domestica</i> L.	P-NE	<i>Dalbergia retusa</i>	C-VU
<i>Pyrus communis</i>	P-NE	<i>Dalbergia Stevensonii</i>	C-NE
<i>Acer platanoides</i>	C-NE	<i>Dalbergia variabilis</i>	C-NE
<i>Acer pseudoplatanus</i>	C-NE	<i>Diospyros celebica</i>	C-VU
<i>Artocarpus lakoocha</i>	C-NE	<i>Diospyros crassiflora</i>	C-EN
<i>Byra ebanus</i>	C-NE	<i>Diospyros melanoxylon</i>	C-NE
<i>Calycophyllum multiflorum</i>	C-NE	<i>Guibourtia schliebenii</i>	C-VU
<i>Casearia praecox</i>	C-NE	<i>Guibourtia tessmannii</i>	C-NE
<i>Dalbergia cearenses</i>	C-NE	<i>Mopani Colophospermum</i>	C-NE
<i>Dalbergia decipularis</i>	C-NE	<i>Olea europea</i>	C-NE
<i>Dalbergia latifolia</i>	C-VU	<i>Stephegyne parviflora</i>	C-NE
<i>Dalbergia melanoxylon</i>	C-NT	<i>Tabebuia impetiginosa</i> S.	F-NT
<i>Dalbergia nigra</i>	C-VU	<i>Tabebuia serratifolia</i> N.	F-NE

P: Species used in the past  
C: Species used currently  
F: Possible Species for the future  
EN: Endangered

NE: This specie is not evaluated in the IUCN Red List of Threatened Species  
VU: Vulnerable  
NT: Lower Risk/near threatened

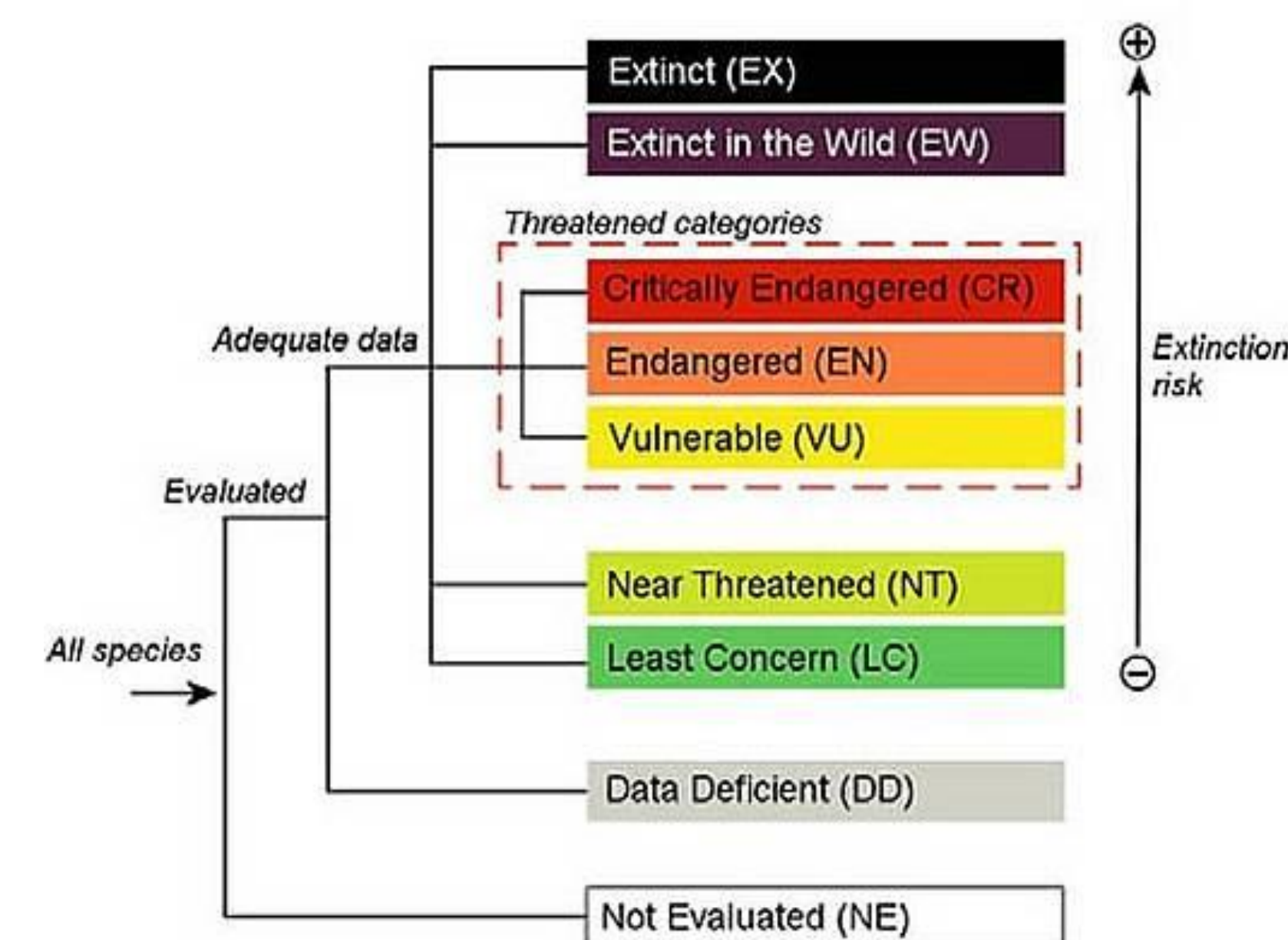
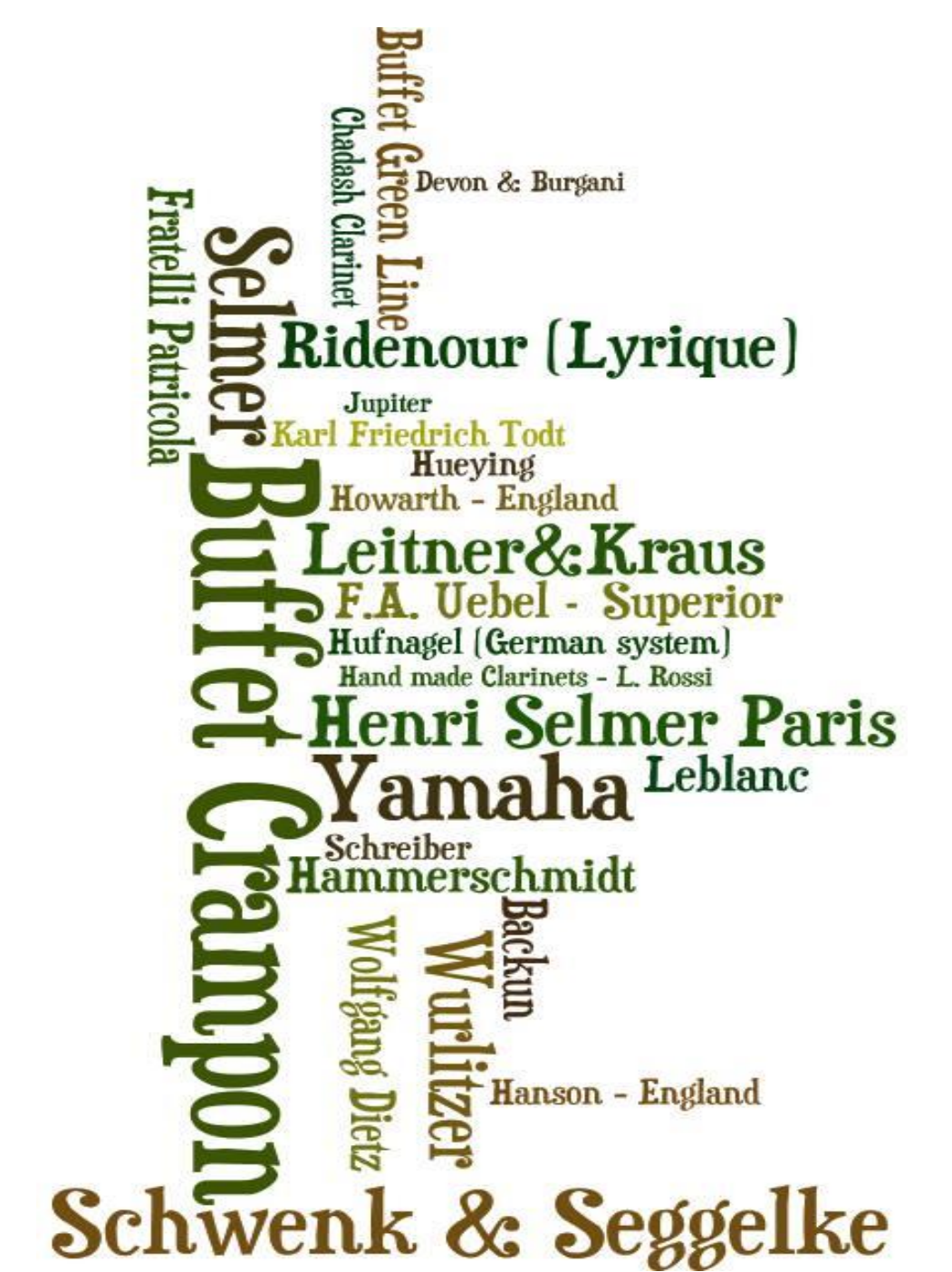


Figure 1: Structure of the categories used at the regional level (IUCN, 2012).



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## APPROACH

The information presented in this report has been collected from three types of sources:

- Literature review (Specialized journals, books and websites).
- Direct Interviews with the experts in the field (Musicians, manufactures and other professionals).
- Online surveys by email and direct contact. It was sent Clarinets teachers, clarinetists and members of some associations.