Building Capacity for Forest Inventory in the Republic of Congo

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Introduction

The Republic of Congo is rich in biodiversity, with 60% tropical forest coverage. This poster describes the progress of a new project supporting the conservation of these forests.

At present conservationists, foresters and policymakers are faced with a lack of botanical data on which to base forest management plans. Very few people can identify the forest trees, and there are no identification guides.

Based in northern Congo, this project aims to provide:

• Training,

• Support for plant collecting,

• Taxonomic data, and

• Tools for plant identification, such as training manuals.

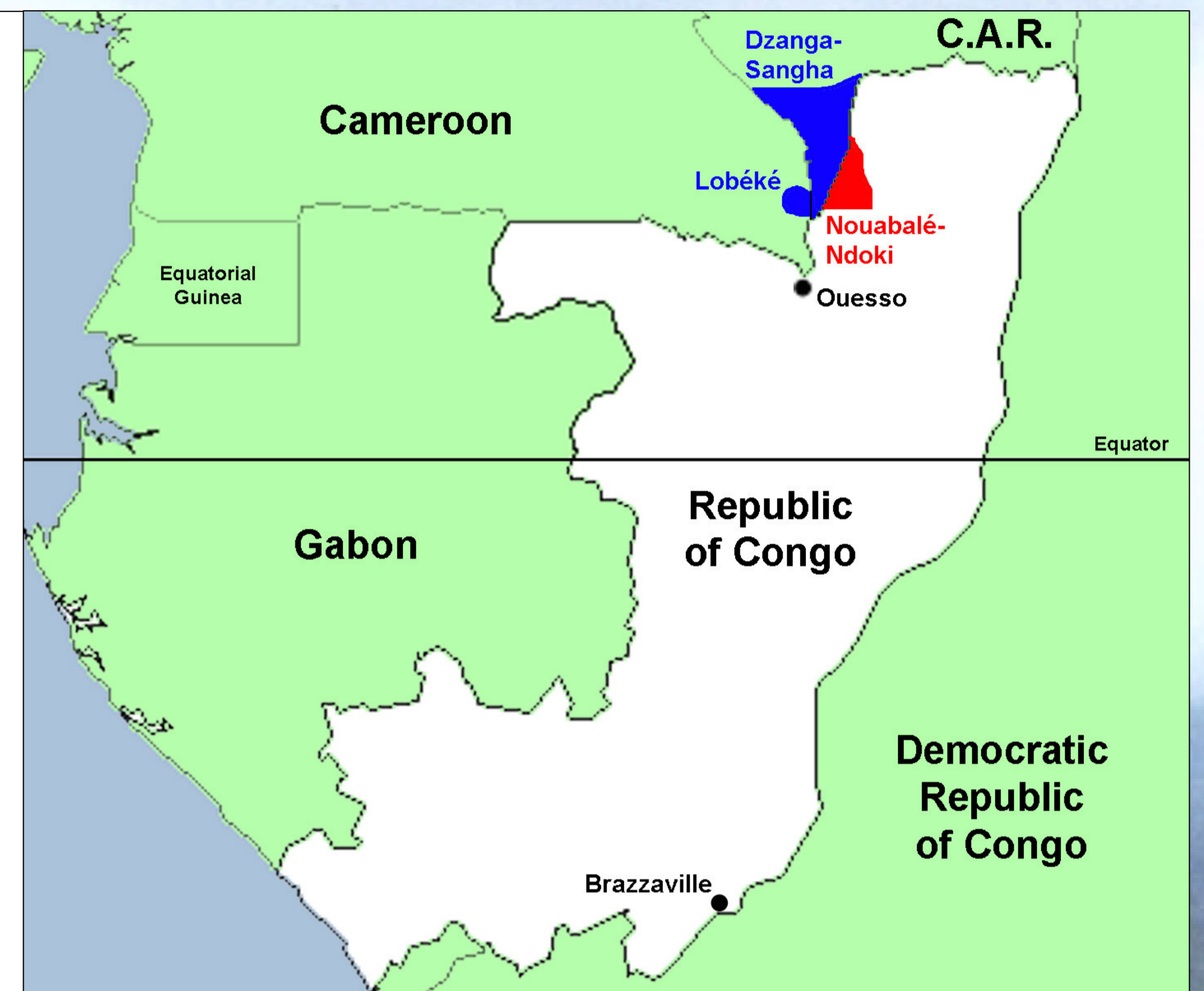The project runs from 1 June 2006 until 31 Mar 2009. Its impact, however, will last much longer.

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Location

Our project focuses on the Nouabalé-Ndoki National Park and surrounding buffer zone in northern Congo, part of the Sangha Trinational Zone, a complex of protected areas including Dzanga-Sangha National Park (Central African Republic) and Lobéké National Park (Cameroon).

The vegetation of this area comprises mainly heterogeneous *terra firma* semi-evergreen forest (described by Harris, 2002), with patches of other vegetation types such as *Gilbertiodendron dewevrei* forest and swamp forest.

Methods

The project has two main foci: taxonomic training and taxonomic tools.

Training and collecting take place in 30 one-hectare permanent plots in and around Nouabalé-Ndoki National Park.

These collections (c. 5,000 to date), plus a similar number of collections made in the area over the past 20 years, provide a comprehensive sample of the tree flora of the northern Congo.

Specimen information is stored in a BRAHMS (Botanical Research and Herbarium Management System) database (http://herbaria.plants.ox.ac.uk/bol/home/).

For this project, we focused on trees and strangler figs over 10 cm dbh when mature, and smaller trees that were likely to be confused with these species.

Lindackeria dentata (collection Moukassa 1) © David Harris

Training

The main aims of this project are to provide:

• Training for a team of para-taxonomists to identify all their local tree species,

• Postgraduate training,

• Professional development, and

• Support for existing tertiary education in Congo.

To date, seven people have taken part in a training course on *Botanical Inventory and Identification*, including techniques for identification, collection and recording of botanical specimens.

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The *Draft Checklist*

An ongoing part of the project is a *Draft Checklist of the Trees of the Northern Republic of Congo*, intended to be used by foresters and researchers with a special interest in trees. At present it contains 468 species in 55 families.

The checklist is arranged alphabetically by genus and species. It includes selected synonyms, references to the works used to identify the species, notes on habitat and threatened status where known.

Only 40 (8%) of the species have been assessed for conservation status, of which 28 are Vulnerable, Endangered or Critically Endangered. We urgently need to determine the conservation status of the remainder of the trees in this area, to facilitate management strategies for the increased protection of threatened species.

Copies of the checklist are available here, or by email from the authors.

*Mucuna flagellipes* (collection Makana Bola 3) © David Harris

The manual

The *Draft Checklist* is a vital resource, but is only the starting point in producing a more useful training manual, in the form of a Field Guide. This guide will be:

• Image-rich and text poor,

• Economical to produce and copy, relatively disposable, and

• Soft-cover, sewn-binding, black-and-white, A4, easy to take into the field.

It will contain:

• Text in English & French,

• Two species per page,

• Descriptions focusing on distinguishing vegetative characters, and

• Line-drawings of the leaves of every species, produced by the botanical illustrator Rosemary Wise.

A draft design for the field guide is shown here.
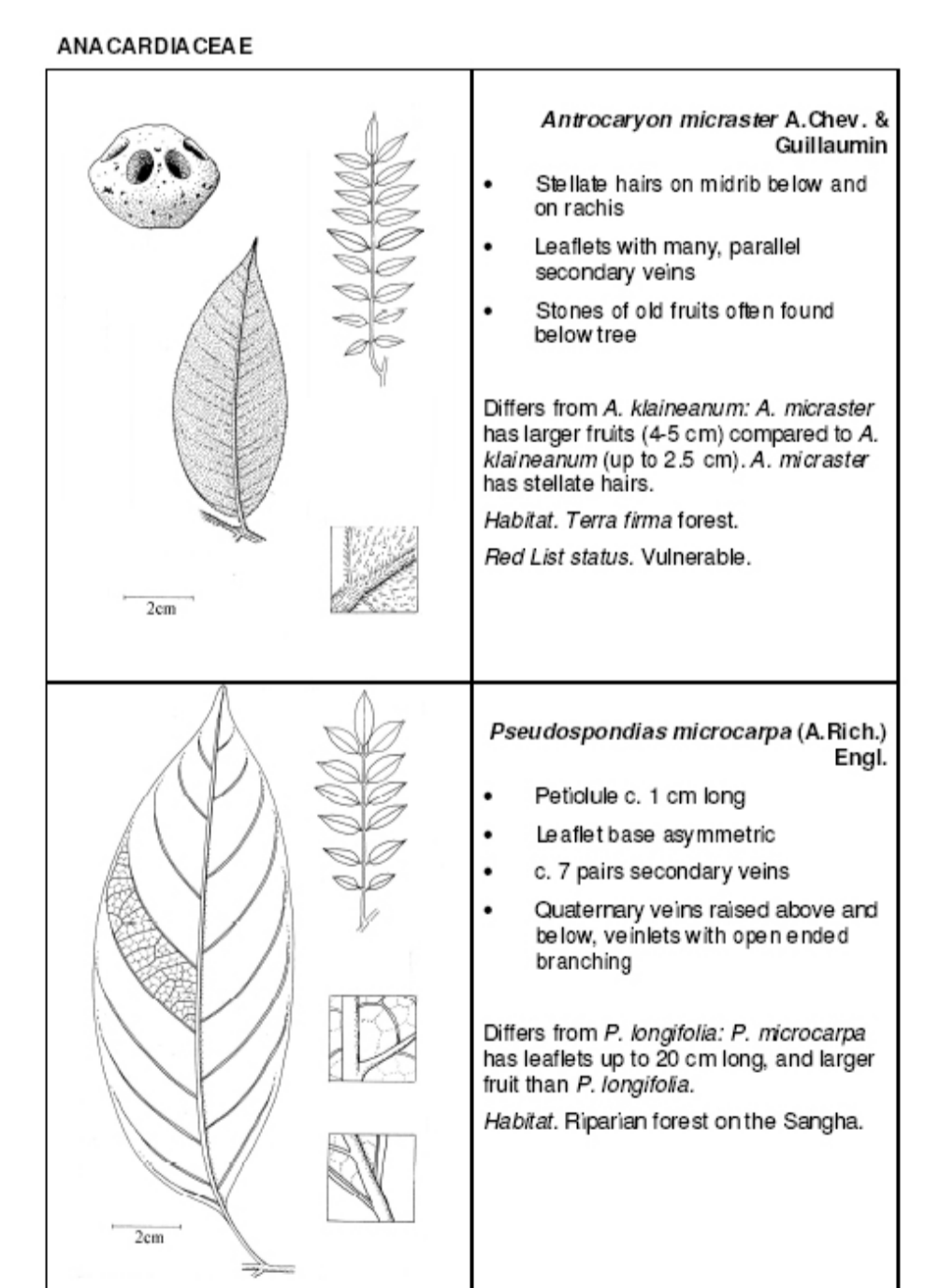
References and acknowledgements

Harris, D.J. 2002. The vascular plants of the Dzanga-Sangha Reserve, Central African Republic. *Scripta Botanica Belgica* 23: 1—274. Brussels: National Botanic Garden of Belgium.