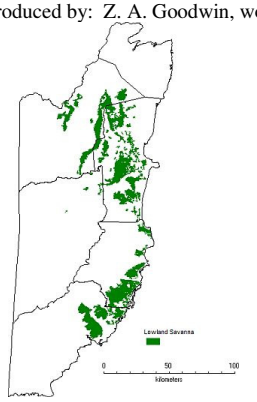
Savanna of Belize
The Lowland Savanna

Zoë Goodwin, Sam Bridgewater & David Harris

Photos by Z. A. Goodwin, S. Bridgewater & D. J. Harris. Produced by: Z. A. Goodwin, work supported by the Darwin Initiative. Version 2011/03/29

Lowland savannas occupy almost 10% of Belize and provide the main habitat for the **Caribbean Pine** (*Pinus caribaea*, 1-3), an important tree for timber & as nesting sites for the endangered Yellow-headed parrot (*Amazona oratrix*), which also rely on **Palmetto** (*Acoelorraphe wrightii*, 14-16) seeds for food.

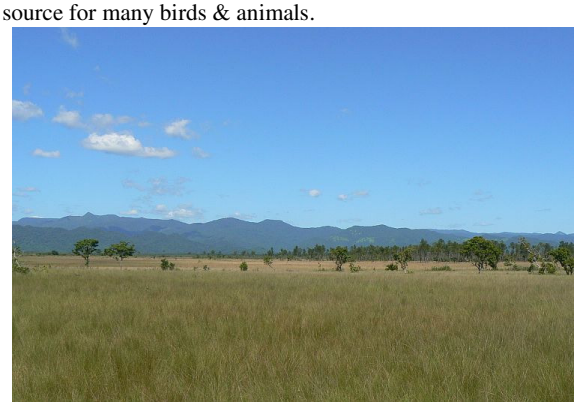
Other conspicuous species include the **Craboo** (*Byrsonima crassifolia*, 4-6), a very common shrub in the savanna & one that is cultivated throughout Belize for its fruit. **Yaha** or the **Sandpaper Tree** (*Curatella americana*, 7-9) is very common in drier areas of savanna; the rough leaves are traditionally used as sandpaper. **Calabash** (*Crescentia cujete*, 10-13) is a common small tree in open savanna & wetland margins; the large fruit can be hollowed out and used for bowls. **Oak** (*Quercus oleoides*, 17-20) acorns are an important food source for many birds & animals.



Distribution of lowland savanna in Belize

Pine woodland is found in well drained sandy areas & has a dense canopy of *Pinus caribaea*, often with a dense understory of Oak and shrubs. The herb layer is dominated by grasses and a rich herb layer; typical species include *Hypericum terrae-firmae* (64), *Turnera* spp. (62), *Oxalis frutescens* (63), *Clitoria guianensis* (56) & *Sauvagesia erecta* (27).

Pine woodland



Open savanna

Open savanna is often a poorly-drained grassland with pine, oak, palmetto and craboo scattered in little shrub islands. The herb layer is dominated by grasses, sedges, seasonal herbs such as *Polygala* spp. (49-50), moisture-loving species such as *Xyris* spp. (76 & 77) and small carnivorous herbs such as *Utricularia* spp. (51, 68 & 69) & *Drosera capillaris* (88).

Oak woodland

Oak woodland is found in areas of good drainage & has a dense canopy of Oak, *Quercus oleoides*, often with a thick understory of shrubs such as *Calliandra houstoniana* (84), *Russelia sarmentosa* (85) & *Miconia albicans* (35).

Forest species such as *Tabernaemontana alba* (32) & *Hampea trilobata* (31) often occur here. Under the thick canopy the herb layer tends to be sparse with a few grasses and a thick leaf litter layer. Termite nests are common.

Palmetto thicket

Palmetto thickets are dense stands of palmetto found in poorly drained areas with water-filled potholes and raised tussocks. Many shrubs that occur here include *Parathesis cubana* (82), *Acmella filipes* var. *cayensis* (78), *Hibiscus costatus* (44) & *Mimosa* spp. (46-47).

Wetlands include *Eleocharis* or *Cladium* dominated marshes and lagoon systems, species include *Sagittaria lancifolia* (21) & Water Lillies (*Nymphaea ampla*, 34).

Savannas and wetlands are important for birds

Seasonally waterlogged savanna with shrubs & trees occurs in areas that are flooded for many weeks at a time during wet season. Common shrubs include Calabash, *Camareria latifolia* (28), *Dalbergia glabra* (26), *Bonellia macrocarpa* (81 & 89) & *Haematoxylum campechianum* (Logwood, 67). This habitat often occurs as a fringe between savanna and wetlands.

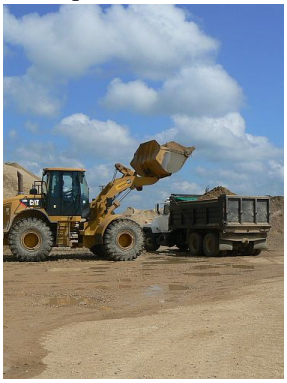
Seasonally waterlogged savanna with shrubs & trees

For further information please visit:

www.eeo.ed.ac.uk/sea-belize

This guide has been produced as part of Darwin Initiative Project 17-022 Conservation of the Lowland Savannas of Belize

Fire



Gravel extraction

Threatened by a combination of human pressures, this ecosystem remains under-valued and under-represented within Belize's extensive protected area system.

Threats include rubbish dumping, manmade fires & clearance for agriculture, aquaculture, roadbuilding & settlement. Erosion can also be a problem when savanna is disturbed.

Severe erosion

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Savanna of Belize
Common Woody Plants

2

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1 Pinus caribaea
PINACEAE

2 Pinus caribaea
PINACEAE

3 Pinus caribaea
PINACEAE

4 Byrsonima crassifolia
MALPIGHIACEAE

5 Byrsonima crassifolia
MALPIGHIACEAE

6 Byrsonima crassifolia
MALPIGHIACEAE

7 Curatella americana
DILLENIACEAE

8 Curatella americana
DILLENIACEAE

9 Curatella americana
DILLENIACEAE

10 Crescentia cujete
BIGNONIACEAE

11 Crescentia cujete
BIGNONIACEAE

12 Crescentia cujete
BIGNONIACEAE

13 Crescentia cujete
BIGNONIACEAE

14 Acoelorraphe wrightii
ARECACEAE

15 Acoelorraphe wrightii
ARECACEAE

16 Acoelorraphe wrightii
ARECACEAE

17 Quercus oleoides
FAGACEAE

18 Quercus oleoides
FAGACEAE

19 Quercus oleoides
FAGACEAE

20 Quercus oleoides
FAGACEAE

Savanna of Belize
White Flowers

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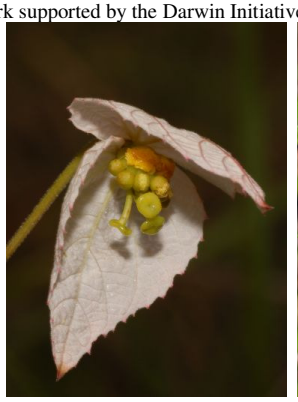
21 Sagittaria lancifolia
ALISMATACEAE

22 Evolvulus sericeus
CONVOLVULACEAE

23 Merremia aturensis
CONVOLVULACEAE



24 Dalechampia schippia
EUPHORBIACEAE

25 Rhynchospora nervosa
CYPERACEAE

26 Dalbergia glabra
FABACEAE

27 Sauvagesia erecta
OCHNACEAE

28 Camareria latifolia
APOCYNACEAE

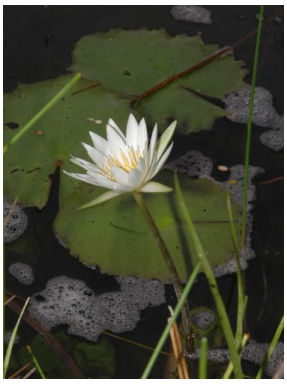
29 Sida linifolia
MALVACEAE

30 Rhabdadenia biflora
APOCYNACEAE

31 Hampea trilobata
MALVACEAE

32 Tabernaemontana alba
APOCYNACEAE

33 Cipura spp.
IRIDACEAE



34 Nymphaea ampla
NYMPHACEAE

35 Miconia albicans
MELASTOMATACEAE

36 Buchnera pusilla
PLANTAGINACEAE

37 Citharexylum caudatum
VERBENACEAE

38 Metastelma spp.
APOCYNACEAE

39 Coutoubea spicata
GENTIANACEAE

40 Pithecellobium lanceolatum
FABACEAE

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Pink-Purple-Blue Flowers

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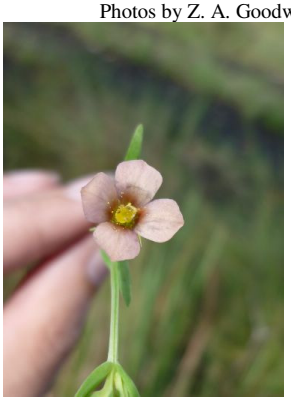

41 Schultesia guianensis
GENTIANACEAE

42 Schultesia brachyptera
GENTIANACEAE

43 Diodella apiculata
RUBIACEAE

44 Hibiscus costatus
MALVACEAE

45 Marsypianthes chamaedrys
LAMIACEAE

46 Mimosa spp.
FABACEAE

47 Mimosa spp.
FABACEAE

48 Agalinis harperi
OROBANCHACEAE

49 Polygala longicaulis
POLYGALACEAE

50 Polygala adenophora
POLYGALACEAE

51 Utricularia spp.
LENTIBULARIACEAE

52 Angelonia ciliaris
PLANTAGINACEAE

53 Bletia purpurea
ORCHIDACEAE

54 Vigna linearis
FABACEAE

55 Desmodium barbatum
FABACEAE

56 Clitoria guianensis
FABACEAE

57 Alophia silvestris
IRIDACEAE

58 Passiflora urbaniana
PASSIFLORACEAE

59 Melochia spicata
MALVACEAE

60 Ageratum radican
ASTERACEAE

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Yellow Flowers

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61 Cochlospermum vitiifolium
BIXACEAE

62 Turnera spp.
PASSIFLORACEAE

63 Oxalis frutescens
OXALIDACEAE

64 Hypericum terrae-firmae
HYPERICACEAE

65 Davilla kunthii
DILLENIACEAE

66 Chamaecrista spp
FABACEAE

67 Hamaetoxylum campechianum FABACEAE

68 Utricularia spp.
LENTIBULARIACEAE

69 Utricularia spp.
LENTIBULARIACEAE

70 Stylosanthes spp.
FABACEAE

71 Zornia reticulata
FABACEAE

72 Hypoxis humilis
HYPOXIDACEAE

73 Curculigo scorzonerifolia
HYPOXIDACEAE

74 Mandevilla subsagittata
APOCYNACEAE

75 Pentalinon andrieuxii
APOCYNACEAE

76 Xyris spp.
XYRIDACEAE

77 Xyris spp.
XYRIDACEAE

78 Acmella filipes var. cayensis
ASTERACEAE

79 Calea longipedicellata
ASTERACEAE

80 Acacia spp.
FABACEAE

Savanna of Belize
Red-Orange Flowers & Fruit

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81 Bonellia macrocarpa
THEOPHRASTACEAE

82 Parathesis cubana
MYRSINACEAE

83 Macroptilium gracile
FABACEAE

84 Calliandra houstoniana
FABACEAE

85 Russelia sarmentosa
PLANTAGINACEAE

86 Helicteres guazumifolia
MALVACEAE

87 Triumfetta speciosa
MALVACEAE

88 Drosera capillaris
DROSERACEAE

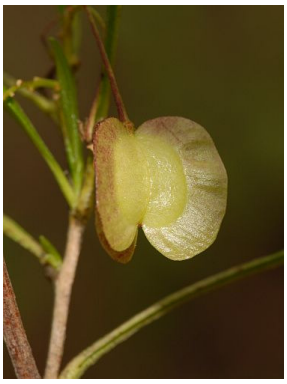
89 Bonellia macrocarpa
THEOPHRASTACEAE

90 Cochlospermum vitiifolium
BIXACEAE

91 Crescentia cujete
BIGNONIACEAE

92 Davilla kunthii
DILLENIACEAE

93 Dioscorea matagalpensis
DIOSCORIACEAE



94 Dodonea viscosa
SAPINDACEAE

95 Hemiangium excelsum
CELASTRACEAE

96 Helicteres guazumifolia
MALVACEAE

97 Mimosa bahamensis
FABACEAE

98 Calliandra houstoniana
FABACEAE

99 Cojoba graciliflora
FABACEAE

100 Pithecellobium lanceolatum
FABACEAE