

Tropical Fire Ecology

[DOWNLOAD HERE](#)

1;Title Page ;3 2;Copyright Page ;4 3;Table of Contents ;5 4;Preface ;17 5;Figures ;20 6;Tables ;25
7;Abbreviations and acronyms ;27 8;Contributors ;31 9;1 Fire in the tropics ;37 9.1;1.1 INTRODUCTION
;37 9.2;1.2 TROPICAL WILDFIRES: SITUATION AND IMPACTS ;38 9.2.1;1.2.1 Overview ;38 9.2.2;1.2.2
Economic impacts ;40 9.2.3;1.2.3 Health issues ;41 9.2.4;1.2.4 Environmental impacts ;43 9.3;1.3 CASE
STUDIES OF TROPICAL FIRES: MEXICO AND BRAZIL ;46 9.3.1;1.3.1 Mexico ;46 9.3.2;1.3.2 Brazil ;50
9.4;1.4 IMPLICATIONS ;53 9.5;1.5 ACKNOWLEDGMENTS ;54 9.6;1.6 REFERENCES ;54 10;2 Fire and
fire ecology: Concepts and principles ;60 10.1;2.1 FIRE AND COMBUSTION ;60 10.2;2.2 HEAT
TRANSFER ;63 10.2.1;2.2.1 Conduction ;63 10.2.2;2.2.2 Convection ;64 10.2.3;2.2.3 Radiation ;64
10.3;2.3 FUELS ;66 10.3.1;2.3.1 Fuel composition ;66 10.3.2;2.3.2 Fuel loading and arrangement ;66
10.3.3;2.3.3 Fuel moisture ;68 10.3.4;2.3.4 Total fuels ;68 10.3.5;2.3.5 Live fuels ;68 10.3.6;2.3.6 Dead
fuels ;72 10.3.7;2.3.7 Moisture exchange ;72 10.3.8;2.3.8 Fuel continuity ;73 10.4;2.4 OXYGEN ;74
10.5;2.5 WILDLAND FIRE ;74 10.5.1;2.5.1 Fire types ;75 10.5.1.1;2.5.1.1 Surface fires ;75
10.5.1.2;2.5.1.2 Ground fires ;76 10.5.1.3;2.5.1.3 Crown fires ;76 10.5.2;2.5.2 Fire characteristics ;76
10.5.2.1;2.5.2.1 Flame height ;76 10.5.2.2;2.5.2.2 Flame length and fireline intensity ;77 10.5.2.3;2.5.2.3
Fireline intensity ;78 10.5.2.4;2.5.2.4 Height of crown scorch ;78 10.5.2.5;2.5.2.5 Fire spread rate ;81
10.5.2.6;2.5.2.6 Flame depth ;81 10.5.2.7;2.5.2.7 Residence time ;81 10.6;2.6 FIRE ECOLOGY ;84
10.6.1;2.6.1 Fire regimes ;84 10.6.2;2.6.2 Fire regime characteristics ;85 10.6.2.1;2.6.2.1 Fire extent ;85
10.6.2.2;2.6.2.2 Fire seasonality ;85 10.6.2.3;2.6.2.3 Fire frequency ;86 10.6.2.4;2.6.2.4 Fire intensity and
fire severity ;86 10.6.3;2.6.3 Fire regime classification ;86 10.6.4;2.6.4 The action of fire in ecosystems
;88 10.6.5;2.6.5 Tropical fire ecology ;90 10.7;2.7 ACKNOWLEDGMENTS ;90 10.8;2.8 REFERENCES
;90 11;Part I Global overview of fire in the tropics ;98 12;3 Overview: Global fire regime conditions,
threats, and opportunities for fire management in the tropics ;99 12.1;3.1 ABSTRACT ;99 12.2;3.2
INTRODUCTION ;100 12.3;3.3 ASSESSING THE WORLD'S FIRE REGIMES ;101 12.4;3.4 FIRE
REGIME TYPES ;102 12.5;3.5 THE STATE OF THE WORLD'S TROPICAL FIRE REGIMES ;103
12.6;3.6 CAUSES OF CHANGING FIRE REGIMES IN THE TROPICS ;106 12.6.1;3.6.1 Climate change

;106 12.6.2;3.6.2 Agriculture and livestock ranching ;107 12.6.3;3.6.3 Rural and urban development ;109 12.6.4;3.6.4 Energy production ;109 12.6.5;3.6.5 Fire exclusion and suppression ;109 12.6.6;3.6.6 Invasive species ;110 12.6.7;3.6.7 Plantations ;110 12.6.8;3.6.8 Arson ;110 12.7;3.7 INTERACTIONS ;111 12.8;3.8 PRESCRIBED BURNING FOR ECOLOGICAL BENEFIT ;111 12.9;3.9 INTEGRATED FIRE MANAGEMENT ;111 12.10;3.10 CONCLUSIONS ;113 12.11;3.11 REFERENCES ;114 13;Part II Fire in the Australian tropics ;118 14;4 Fire-driven land cover change in Australia and W. D. Jackson's theory of the fire ecology of southwest Tasmania ;119 14.1;4.1 ABSTRACT ;119 14.2;4.2 INTRODUCTION ;120 14.3;4.3 THE ECOLOGY OF SOUTHWEST TASMANIA ;121 14.3.1;4.3.1 Development of a theory ;121 14.3.2;4.3.2 Ecological Drift model ;121 14.3.3;4.3.3 Evidence and alternative perspectives ;125 14.4;4.4 THE ECOLOGICAL DRIFT MODEL AND QUANTIFYING FIRE FREQUENCY ;126 14.4.1;4.4.1 Methods of quantifying fire frequency ;126 14.4.2;4.4.2 Fire frequency in Victorian montane forests ;127 14.4.3;4.4.3 Stand age and fire risk ;128 14.4.4;4.4.4 Landscape effects on fire frequency ;128 14.5;4.5 FIRE FREQUENCY, EDAPHIC FEEDBACKS, AND ABORIGINAL LANDSCAPE BURNING IN AUSTRALIAN TROPICAL SAVANNAS ;130 14.5.1;4.5.1 Aboriginal fire regimes - evidence from northern Australia savannas ;130 14.5.2;4. EAN/ISBN : 9783540773818 Publisher(s): Springer, Berlin Format: ePub/PDF Author(s): Cochrane, Mark A.

[DOWNLOAD HERE](#)

Similar manuals:

[Tropical Fire Ecology](#)