

## DISTRIBUTION OF AND CONSERVATION PRIORITIES FOR BORNEAN SMALL CARNIVORES AND CATS

**Editors:**  
**Andreas Wilting**  
**J.W. Duckworth**  
**Christine Breitenmoser-Würsten**  
**Jerrold L. Belant**  
**John Mathai**

---

### CONTENTS

Introduction: distribution of and conservation priorities for Bornean small carnivores and cats. <b>Andreas Wilting, J.W. Duckworth, Jerrold L. Belant, Nicole Duplaix and Christine Breitenmoser-Würsten</b> .....	1
The zooarchaeology of carnivores in Borneo, with a proposal for continuing collection. <b>Earl of Cranbrook</b> .....	9
The Borneo carnivore database and the application of predictive distribution modelling. <b>Stephanie Kramer-Schadt, Vanessa Reinfelder, Jürgen Niedballa, Jana Lindenborn, Milena Stillfried, Ilja Heckmann and Andreas Wilting</b> .....	18
Predicted distribution of the yellow-throated marten <i>Martes flavigula</i> (Mammalia: Carnivora: Mustelidae) on Borneo. <b>Jason Hon, Andrew J. Hearn, Joanna Ross, Hiromitsu Samejima, Dave M. Augeri, John Mathai, Azlan Mohamed, Ramesh Boonratana, Gabriella Fredriksson, Susan M. Cheyne, Matt Heydon, Rustam, Raymond Alfred, Gono Semiadi, Henry Bernard, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting</b> .....	42
Predicted distribution of the Malay weasel <i>Mustela nudipes</i> (Mammalia: Carnivora: Mustelidae) on Borneo. <b>Erik Meijaard, Andrew J. Hearn, Joanna Ross, Gabriella Fredriksson, John Mathai, Yoshihiro Nakashima, Henry Bernard, Ramesh Boonratana, Jon Hall, Norman T-L. Lim, Andrew J. Marshall, John D. Pilgrim, Hiromitsu Samejima, Craig Robson, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting</b> .....	50
Predicted distribution of the Bornean ferret badger <i>Melogale everetti</i> (Mammalia: Carnivora: Mustelidae) on Borneo. <b>Andreas Wilting, Andrew J Hearn, James Eaton, Jerrold L. Belant and Stephanie Kramer-Schadt</b> .....	55
Predicted distribution of the Sunda stink-badger <i>Mydaus javanensis</i> (Mammalia: Carnivora: Mephitidae) on Borneo. <b>Hiromitsu Samejima, Erik Meijaard, J. W. Duckworth, Shigeki Yasuma, Andrew J. Hearn, Joanna Ross, Azlan Mohamed, Raymond Alfred, Henry Bernard, Ramesh Boonratana, John D. Pilgrim, James Eaton, Jerrold L. Belant, Stephanie Kramer-Schadt, Gono Semiadi and Andreas Wilting</b> .....	61
Predicted distribution of banded linsang <i>Prionodon linsang</i> (Mammalia: Carnivora: Prionodontidae) on Borneo. <b>J. W. Duckworth, Hiromitsu Samejima, Gono Semiadi, Andrew J. Hearn, Joanna Ross, Gabriella Fredriksson, Susan M. Cheyne, Matt Heydon, Dave M. Augeri, Jedediah Brodie, Anthony Giordano, Yoshihiro Nakashima, Ramesh Boonratana, Jason Hon, Andrew J. Marshall, John Mathai, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting</b> .....	71
Predicted distribution of the Malay civet <i>Viverra zibetha</i> (Mammalia: Carnivora: Viverridae) on Borneo. <b>Joanna Ross, Andrew J. Hearn, David W. Macdonald, Raymond Alfred, Susan M. Cheyne, Azlan Mohamed, Ramesh Boonratana, Henry Bernard, Jason Hon, Rustam, Jedediah F. Brodie, Anthony Giordano, Matt Heydon, Gono Semiadi, John Mathai, Gabriella Fredriksson, Andrew J. Marshall, John D. Pilgrim, Tim van Berkel, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting</b> .....	78

Predicted distribution of the common palm civet <i>Paradoxurus hermaphroditus</i> (Mammalia: Carnivora: Viverridae) on Borneo. Miyabi Nakabayashi , Yoshihiro Nakashima, Andrew J. Hearn, Joanna Ross, Raymond Alfred, Hiromitsu Samejima, Azlan Mohamed, Matt Heydon, Rustam, Henry Bernard, Gono Semiadi, Gabriella Fredriksson, Ramesh Boonratana, Andrew J. Marshall, Norman T-L. Lim, Dave M. Augeri, Jason Hon, John Mathai, Tim van Berkel, Jedediah Brodie, Anthony Giordano, Jon Hall, Brent Loken, Sophie Persey, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	84
Predicted distribution of the masked palm civet <i>Paguma larvata</i> (Mammalia: Carnivora: Viverridae) on Borneo. Gono Semiadi, Joanna Ross, Andrew J. Hearn, David W. Macdonald, John Mathai, Dave M. Augeri, Gabriella Fredriksson, Rustam, Raymond Alfred, Jon Hall, Matt Heydon, Jedediah F. Brodie, Anthony Giordano, Andrew J. Marshall, James A. Eaton, Azlan Mohamed, Hiromitsu Samejima, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	89
Predicted distribution of the binturong <i>Arctictis binturong</i> (Mammalia: Carnivora: Viverridae) on Borneo. Gono Semiadi, Joanna Ross, Andrew J. Hearn, Matt Heydon, Hiromitsu Samejima, John Mathai, Dave Augeri, Gabriella Fredriksson, Norman T.-L. Lim, Rustam, Azlan Mohamed, Ramesh Boonratana, Jedediah F. Brodie, Anthony Giordano, Yoshihiro Nakashima, Tim van Berkel, Jason Hon, Brent Loken, Andrew J. Marshall, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	96
Predicted distribution of small-toothed palm civet <i>Arctogalidia trivirgata</i> (Mammalia: Carnivora: Viverridae) on Borneo. J.W. Duckworth, Gabriella Fredriksson, Matt Heydon, Raymond Alfred, Ramesh Boonratana, James Eaton, Jon Hall, Andrew J. Marshall, Yoshihiro Nakashima, Hiromitsu Samejima, Dave M. Augeri, Susan M. Cheyne, Andrew J. Hearn, Norman T-L. Lim, John Mathai, Joanna Ross, Rustam, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	103
Predicted distribution of the banded civet <i>Hemigalus derbyanus</i> (Mammalia: Carnivora: Viverridae) on Borneo. Joanna Ross, Andrew Hearn, David W. Macdonald, Gono Semiadi, Raymond Alfred, Azlan Mohamed, Jedediah F. Brodie, Anthony Giordano, Matt Heydon, Jason Hon, Rustam, John Mathai, Gabriella Fredriksson, Ramesh Boonratana, Brent Loken, Andrew J. Marshall, Tim van Berkel, Norman T-L. Lim, Susan M. Cheyne, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	111
Predicted distribution of Hose’s civet <i>Diplogale hosei</i> (Mammalia: Carnivora: Viverridae) on Borneo. John Mathai, Jedediah Brodie, Anthony Giordano, Raymond Alfred, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting ....	118
Predicted distribution of the otter civet <i>Cynogale bennettii</i> (Mammalia: Carnivora: Viverridae) on Borneo. Susan M. Cheyne, Azlan Mohamed, Andrew J. Hearn, Joanna Ross, Hiromitsu Samejima, Matt Heydon, Dave M. Augeri, Tim van Berkel, Ramesh Boonratana, Gabriella Fredriksson, Jason Hon, Andrew J. Marshall, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	126
Predicted distribution of short-tailed mongoose <i>Herpestes brachyurus</i> (Mammalia: Carnivora: Herpestidae) on Borneo. J. W. Duckworth, Andrew J. Hearn, Joanna Ross, Hiromitsu Samejima, Azlan Mohamed, Susan M. Cheyne, Raymond Alfred, Dave M. Augeri, John Mathai, Matt Heydon, Ramesh Boonratana, Rustam, Gono Semiadi, Tim van Berkel, Jedediah F. Brodie, Anthony Giordano, James Eaton, Gabriella Fredriksson, Jon Hall, Jason J. Hon, Yoshihiro Nakashima, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer-Schadt and Andreas Wilting.....	132
Predicted distribution of the collared mongoose <i>Herpestes semitorquatus</i> (Mammalia: Carnivora: Herpestidae) on Borneo. Jason Hon, Andrew J. Hearn, Joanna Ross, Azlan Mohamed, Raymond Alfred, Hiromitsu Samejima, Susan M. Cheyne, Gono Semiadi, Rustam, Ramesh Boonratana, Gabriella Fredriksson, John Mathai, Norman T-L. Lim, Andrew J. Marshall, David W. Macdonald, Jerrold L. Belant, Stephanie Kramer- Schadt and Andreas Wilting.....	142
Predicted distribution of the Sunda clouded leopard <i>Neofelis diardi</i> (Mammalia: Carnivora: Felidae) on Borneo. Andrew J. Hearn, Joanna Ross, David W. Macdonald, Gilmoore Bolongon, Susan M. Cheyne, Azlan Mohamed, Hiromitsu Samejima, Jedediah F. Brodie, Anthony Giordano, Raymond Alfred, Ramesh Boonratana, Henry Bernard, Brent Loken, Dave M. Augeri, Matt Heydon, Jason Hon, John Mathai, Andrew J. Marshall, John D. Pilgrim, Jon Hall, Christine Breitenmoser-Würsten, Stephanie Kramer-Schadt and Andreas Wilting.....	149

Predicted distribution of the marbled cat *Pardofelis marmorata* (Mammalia: Carnivora: Felidae) on Borneo. **Rustam, Andrew J. Hearn, Joanna Ross, Raymond Alfred, Hiromitsu Samejima, Matt Heydon, Susan M. Cheyne, Jedediah F. Brodie, Anthony J. Giordano, Henry Bernard, Ramesh Boonratana, Brent Loken, Azlan Mohamed, Mohd-Azlan Jayasilan, Dave M. Augeri, James Eaton, Jason Hon, Andrew J. Marshall, John Mathai, Gono Semiadi, David W. Macdonald, Christine Breitenmoser-Würsten, Stephanie Kramer-Schadt and Andreas Wilting**..... 157

Predicted distribution of the bay cat *Catopuma badia* (Mammalia: Carnivora: Felidae) on Borneo. **Andrew J. Hearn, Joanna Ross, David W. Macdonald, Hiromitsu Samejima, Matt Heydon, Henry Bernard, Dave M. Augeri, Gabriella Fredriksson, Jason Hon, John Mathai, Azlan Mohamed, Rustam, Erik Meijaard, Luke T.B. Hunter, Christine Breitenmoser-Würsten, Stephanie Kramer-Schadt and Andreas Wilting**..... 165

Predicted distribution of the flat-headed cat *Prionailurus planiceps* (Mammalia: Carnivora: Felidae) on Borneo. **Andreas Wilting, Susan M. Cheyne, Azlan Mohamed, Andrew J. Hearn, Joanna Ross, Hiromitsu Samejima, Ramesh Boonratana, Andrew J. Marshall, Jedediah F. Brodie, Anthony Giordano, James A. Eaton, Jon Hall, John D. Pilgrim, Matt Heydon, Gono Semiadi, Erik Meijaard, David W. Macdonald, Christine Breitenmoser-Würsten and Stephanie Kramer-Schadt**..... 173

Predicted distribution of the leopard cat *Prionailurus bengalensis* (Mammalia: Carnivora: Felidae) on Borneo. **Azlan Mohamed, Joanna Ross, Andrew J. Hearn, Susan M. Cheyne, Raymond Alfred, Henry Bernard, Ramesh Boonratana, Hiromitsu Samejima, Matt Heydon, Dave M. Augeri, Jedediah F. Brodie, Anthony Giordano, Gabriella Fredriksson, Jon Hall, Brent Loken, Yoshihiro Nakashima, John D. Pilgrim, Rustam, Gono Semiadi, Tim van Berkel, Jason Hon, Norman T-L. Lim, Andrew J. Marshall, John Mathai, David W. Macdonald, Christine Breitenmoser-Würsten, Stephanie Kramer-Schadt and Andreas Wilting**..... 180

Carnivore conservation planning on Borneo: identifying key carnivore landscapes, research priorities and conservation interventions. **John Mathai, J.W. Duckworth, Erik Meijaard, Gabriella Fredriksson, Jason Hon, Anthony Sebastian, Marc Ancrenaz, Andrew J. Hearn, Joanna Ross, Susan Cheyne, Borneo Carnivore Consortium and Andreas Wilting**..... 186

