

1 Erratum to: Fallback foods of red leaf monkeys (*Presbytis rubicunda*) in Danum  
2 Valley, Borneo  
3  
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16 In the published paper, the number of fruiting/flushing trees was erroneously  
17 scored as zero for February-May 2008, rather than as missing data due to the  
18 incomplete phenology recording. The authors apologize sincerely for this error.  
19 Due to the removal of the data, factors affecting seasonal variations in the diet  
20 were found to be both fruiting and flushing phenology, rather than fruiting  
21 phenology alone. Although there have not been changes in the final conclusion,  
22 the authors have added one paragraph to discuss how to explain the results.

23

24 The following changes correct this error, with new text in bold:

25

26 Page 325: Methods subsection 'Phenology' should read:

27 We used data on monthly tree phenology accumulated by the Danum  
28 Valley Field Centre since July 2004, using the same plot set as  
29 Norhayati (2001) and the same protocol as the census conducted from  
30 August 1997 until December 2000 (Wong et al. 2005). They monitored  
31 flushing, flowering, and fruiting activities of 511–533 identified trees of  
32  $\geq 10$  cm diameter at breast height (DBH) every month. Plots were  
33 situated in primary forest, including the home range of the study group.  
34 The monitored area consisted of five transects, each 20x100 m, placed  
35 every 400 m along the 2-km trail. **We did not use data for**  
36 **February-May 2008 because data on species composition in these**  
37 **months were incomplete.**

38

39 Page 326: paragraph 2 of Methods subsection 'Data analysis' should read:

40 We examined the effect of the proportion of fruiting and flushing trees in

41 the phenology survey on the proportion of feeding time of the particular  
42 food category (or species) using a generalized linear model (GLM). We  
43 used data for each month as the unit of analysis (N=21). **The data were**  
44 **not significantly different from normality (Kolmogorov-Smirnov**  
45 **test,  $p>0.05$ ).** We combined fruit and seed feeding because we  
46 expected these two categories of foods to respond in a similar way to  
47 fruit availability. We used only the food species in the phenology census  
48 for the analyses, although we also present data on all food species. The  
49 variance inflation factor (VIF) was **1.34**, which was less than the cut-off  
50 value (5), so collinearity among independent factors did not affect the  
51 results. We choose the model with the smallest AIC among all possible  
52 combinations of independent factors, including the null model.

53

54 Pages 327-328: Replace the two paragraphs in Results subsection 'Seasonal  
55 variation' with the following one:

56 **Red leaf monkeys increased seed and fruit consumption and**  
57 **decreased consumption of *Spatholobus macropterus* young leaves**  
58 **when fruit availability was high and young leaf availability was low,**  
59 **but none of the factors analysed affected non-*Spatholobus***  
60 ***macropterus* young leaf consumption (Fig. 4). The best-fit model**  
61 **predicting fruit+seed consumption, young leaf consumption and**  
62 **consumption of *Spatholobus macropterus* included only the**  
63 **percentage of trees flushing (Table 2). The second-best fit model**  
64 **predicting fruit+seed consumption, young leaf consumption and**  
65 **consumption of *Spatholobus macropterus* included both flushing**

66 and fruiting phenology (Table 2).  $\Delta AIC$  values were small in all  
67 cases (0.5-1.0). The null model was the best-fit model for the  
68 consumption of young leaves other than *Spatholobus*  
69 *macropterus*.

70

71 Page 331: Add the following paragraph at the beginning of Discussion  
72 subsection 'Response to fruiting seasonality':

73 **Our analysis was not straightforward with respect to the factors**  
74 **affecting seasonal variation in diet. Red leaf monkeys increased**  
75 **seed and fruit consumption when young leaf availability (measured**  
76 **as the number of flushing trees) was low and fruit availability was**  
77 **high. This does not mean that the monkeys preferred young leaves,**  
78 **however, because young leaf consumption for species other than**  
79 ***Spatholobus macropterus* (most from trees) was not related to the**  
80 **number of flushing trees in the phenology plots. Correlations**  
81 **between flushing phenology and overall young leaf consumption**  
82 **appear to be due to the consumption of young *S. macropterus***  
83 **leaves, which constituted 60.3 % of young leaf consumption. There**  
84 **are two possible explanations for the observed pattern. First, red**  
85 **leaf monkeys may prefer seeds and increase their consumption of**  
86 **seeds and decrease *S. macropterus* consumption in response to**  
87 **increased fruit availability. The apparent relationship between diet**  
88 **and flushing phenology would then be a by-product of the negative**  
89 **correlations between fruiting and flushing phenology in the current**  
90 **data set (n = 21, r = -0.51, p = 0.019). Second, the availability of**

91 young *S. macropterus* leaves (which we did not measure) may have  
92 been the real influencing factor, and may correlate positively with  
93 the community-wide availability of young tree leaves. In this  
94 scenario, *S. macropterus* young leaves are preferred foods and red  
95 leaf monkeys increase consumption of these leaves when they  
96 increase in availability, which co-occurs with the increase in  
97 flushing trees and decrease in fruiting trees. However, we consider  
98 the second explanation unlikely because *S. macropterus* were so  
99 common in the monkeys' home range. When we surveyed the  
100 number of *S. macropterus* stems In July 2010, the number of  
101 flushing *S. macropterus* stems was 75/ha, more than three times  
102 than the number of fruiting stems at the times of maximum fruit  
103 availability (23/ha, June 2007). We rarely observed the monkeys  
104 reusing young *S. macropterus* leaf food patches, but they  
105 frequently reused seed-feeding patches (Hanya, unpublished data),  
106 suggesting that the number of fruiting trees was a limiting factor  
107 but that of flushing *S. macropterus* stems was not. Therefore, we  
108 consider the first explanation to be more likely: red leaf monkeys  
109 prefer seeds and increase seed consumption in response to  
110 increased availability.

111

112 Page 330: Replace Table II with the following table:

Table II. Best-fit generalized linear models for the effect of phenology on seasonal variation in diet

a. Feeding time on fruits and seeds, best-fit model

AIC=-6.90, R<sup>2</sup>=0.32, P=0.0044

	Coefficient	SE	t	p
(Intercept)	0.72	0.07	10.53	0.000
%Flushing tree	-1.46	0.45	-3.229	0.004

b. Feeding time on fruits and seeds, second best-fit mo

AIC=-6.40, R<sup>2</sup>=0.33, P=0.0100

	Coefficient	SE	t	p
(Intercept)	0.61	0.11	5.41	0.000
%Flushing tree	-1.16	0.52	-2.223	0.039
%Fruiting tree	2.78	2.41	1.153	0.264

c. Feeding time on young leaves, best-fit model

AIC=-13.1, R<sup>2</sup>=0.37, P=0.0021

	Coefficient	SE	t	p
(Intercept)	0.25	0.06	4.24	0.000
%Flushing tree	1.39	0.39	3.547	0.0022

d. Feeding time on young leaves, second best-fit mode

AIC=-12.06, R<sup>2</sup>=0.36, P=0.0069

	Coefficient	SE	t	p
(Intercept)	0.32	0.10	3.24	0.005
%Flushing tree	1.18	0.46	2.58	0.019
%Fruiting tree	-1.90	2.11	-0.90	0.378

e. Feeding time on *Spatholobus macropterus* young leaves, best-fit model

AIC=-18.5, R<sup>2</sup>=0.39, P=0.0016

	Coefficient	SE	t	p
(Intercept)	0.11	0.05	2.12	0.047
%Flushing tree	1.27	0.34	3.68	0.002

f. Feeding time on *Spatholobus macropterus* young leaves, second best-fit model

AIC=-17.6, R<sup>2</sup>=0.38, P=0.0049

	Coefficient	SE	t	p
(Intercept)	0.18	0.09	2.05	0.055
%Flushing tree	1.07	0.40	2.67	0.016
%Fruiting tree	-1.82	1.85	-0.98	0.339

g. Feeding time on non-*Spatholobus macropterus*

young leaves, best-fit model

Null model was the best-fit model (AIC=-24.2)

%Fruiting tree: Percentage of trees bearing food fruits or seeds

%Flushing tree: Percentage of trees flushing food young leaves

113

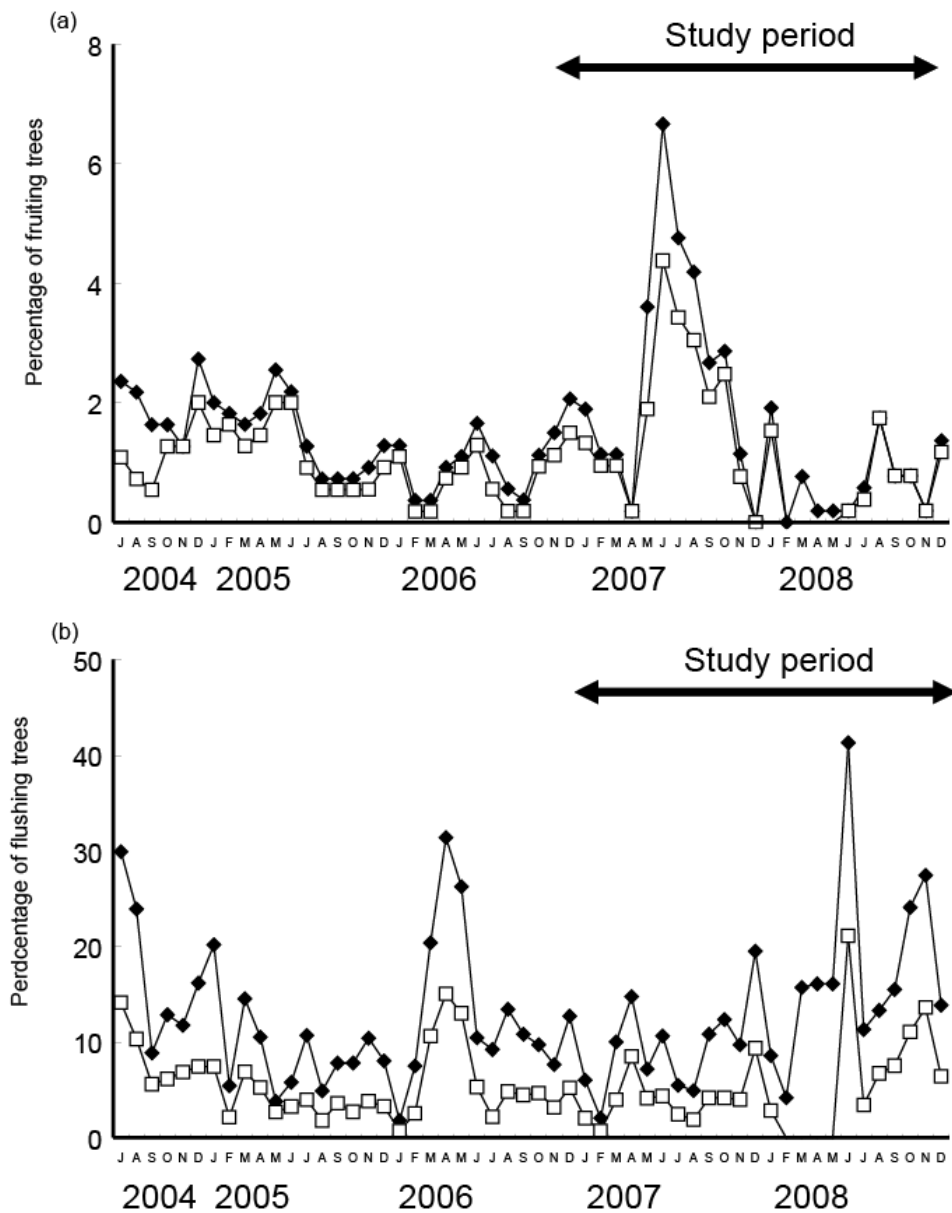
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115

116 Page 328: Replace Fig. 2 with the following figure:

117 Fig. 2. Fruiting (a) and flushing (b) phenology between July 2004 and  
118 December 2008. Values are percentage of total trees in the sample plot  
119 bearing fruit at a given time. Closed diamonds: all trees; open squares:  
120 red leaf monkey food species only. **Data of food species were not**  
121 **available in February-May 2008.**

122

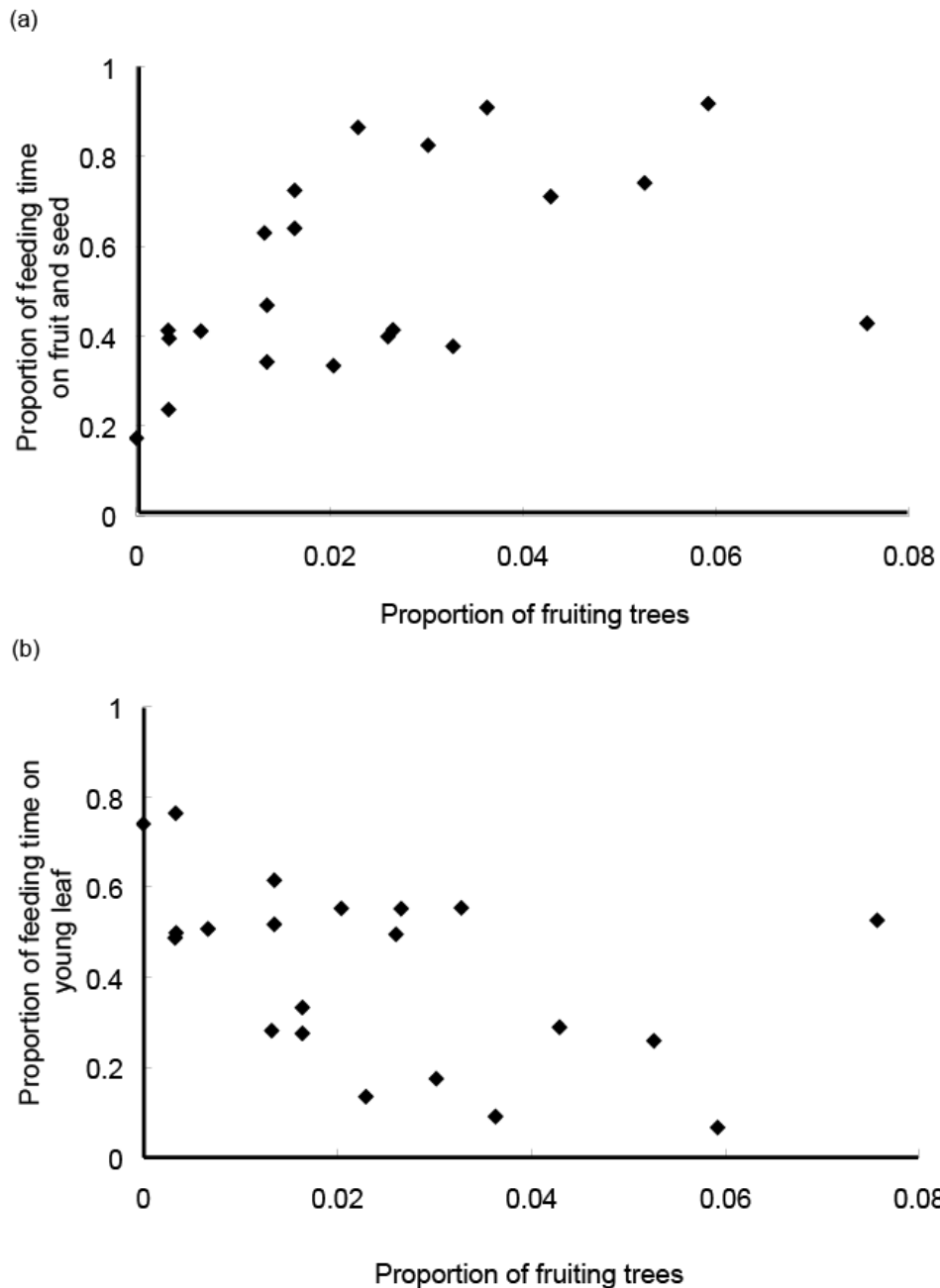


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125 Page 330: Replace Fig. 4 with the following figure:

126 Fig. 4. Relationships between fruiting phenology (proportion of trees  
127 bearing fruits in the phenology plot) and time spent feeding on (a) fruits  
128 and seeds and (b) young leaves.



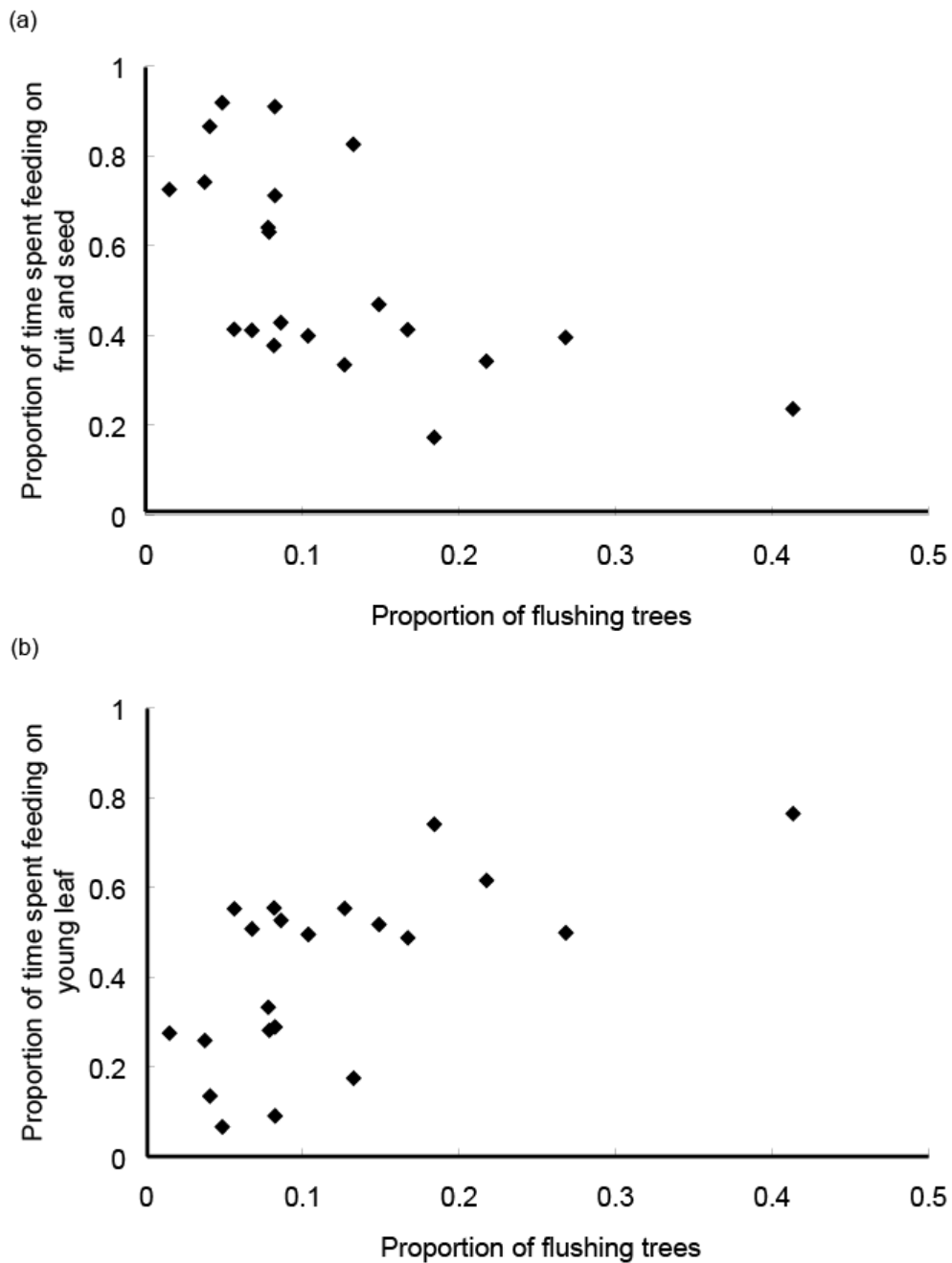
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131 Page 331: Replace Fig. 5 with the following figure:

132 Fig.5. Relationships between flushing phenology (proportion of trees  
133 having young leaves in the phenology plot) and time spent feeding on (a)  
134 fruits and seeds and (b) young leaves.



135