(46) ♀: Ibu = Lisa  A = Anak = Lilly, ♂ = Otto  (47)

| Date: 23-8-07 | | | | | | | | Obs: Ellen, Mudin | | | | Cuaca: mendung | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ibu: Lisa** | | | | **anak: Lilly** | | | | **Ibu: Lisa** | | | | **anak: Lilly** | | | |
| jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi | jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi |

| jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi | jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.46 | | | | | | | | | 7.30 | Ftd | fr(M) | Puwin | 15+ | Ftd | fr(M) | Puwin | 20+ |
| 5.48 | | | | | | | | | 7.32 | R+ | | | | | | | 15+ |
| 5.50 | | | | | | | | | 7.34 | Ftd | fr(M) | Puwin | | Ftd | fr(M) | Puwin | |
| 5.52 | | | | | | | | | 7.36 | | | | | | | | |
| 5.54 | | | | | | | | | 7.38 | | | | | | | | |
| 5.56 | Rs+kc | | | 10+ | | | | | 7.40 | | | | | | | | |
| 5.58 | Rs | | | | | | | | 7.42 | | | | | | | | |
| 6.00 | | | | | | | | | 7.44 | | | | | | | | |
| 6.02 | | | | | | | | | 7.46 | | | | | | | | |
| 6.04 | | | | | | | | | 7.48 | | | | | | | | |
| 6.06 | | | | | | | | | 7.50 | | | | | | | | |
| 6.08 | | | | | | | | | 7.52 | | | | | | | | |
| 6.10 | keluar | | | | Rs | | | 10+ | 7.54 | | | | | | | | |
| 6.12 | R hang + berak | | 5+ | keluar | | | | 7.56 | | | | | | | | |
| 6.14 | R hang | | 1 | ADM | twirl/hang | | 5+ | 7.58 | | | | | | | | |
| 6.16 | Mc ↑ | | 10+ | Mc ↑ dith | | 10+ | 8.00 | | | | | | | | |
| 6.18 | Ftd | fr(½M) | Puwin | 15+ | Ftd | fr(½M) | Puwin | 15+ | 8.02 | | | | | | | | |
| 6.20 | | | | | | | | | 8.04 | | | | | | | | |
| 6.22 | | | | | | | | | 8.06 | | | | | | | | |
| 6.24 | Mt | | | Mt? | | | | 8.08 | | | | | R | hang | + peer I | |
| 6.26 | Ftd | fr(½M) | Puwin | C | hang+bev | | 8.10 | | | | | R | hang | | |
| 6.28 | | | | Ftd | fr(½M) | Puwin | 8.12 | | | | | Ftd | fr(M) | Puwin | |
| 6.30 | | | | | | | | | 8.14 | | | | | | | | |
| 6.32 | | | | | | | | | 8.16 | | | | | | | | |
| 6.34 | | | | | | | | | 8.18 | | | | | | | | |
| 6.36 | | | | | | | | | 8.20 | | | | tree | | | | |
| 6.38 | | | | | | | | | 8.22 | | | | | | | | |
| 6.40 | | | | | | | | | 8.24 | | | | | Mb(?) | | | |
| 6.42 | | | | | | | | 20+ | 8.26 | | | | | Rs? | | | |
| 6.44 | | | | | | | | | 8.28 | | | | | R | hang | | |
| 6.46 | | | | | | | | | 8.30 | R/F | fr(M) | Puwin | 10+ | F | ins | ryp | 10+ |
| 6.48 | | | | | | | | | 8.32 | | | | | F? | fr(M) | Puwin? | |
| 6.50 | | | | | | | | | 8.34 | | | | | | | | |
| 6.52 | | | | | | | | | 8.36 | | | | | | | | |
| 6.54 | | | | | | | | | 8.38 | | | | | N → masuk ... di buat ... | | | |
| 6.56 | | | | | | | | | 8.40 | Mb dith | | | | Mc | keluar N | | |
| 6.58 | | | | | | | | | 8.42 | R | st | | | Ds | | | |
| 7.00 | | | | | | | | 15+ | 8.44 | F | fr(M) | Puwin | | R | hun | | |
| 7.02 | Mb | | | 10+ | Mb | | | 10+ | 8.46 | Ftd | | | | Ds | drink susu | | |
| 7.04 | ? | | | | ? | | | ? | 8.48 | | | | | Ftd | fr(M) | Puw. | |
| 7.06 | Cop | | | 5+ | R | sit + peer? | | 5+ | 8.50 | Mb | | | | Mc | | | |
| 7.08 | | | | | | | | | 8.52 | Ftd | fr(½M) | Puwin | 15+ | Ftd | fr(M) | Puwin | 10+ |
| 7.10 | | | | | | | | | 8.54 | | | | | | | | |
| 7.12 | Mb | | | | F | ? | ^ | 8.56 | | | | | | | | 15+ |
| 7.14 | Ftd | fr(M) | Puwin | 10+ | Ago + Voc | ksy + miss | 8.58 | | | | | | | | |
| 7.16 | | | | | F | ins | ryp | 9.00 | | | | | | | | |
| 7.18 | | | | | Mt | | | 9.02 | F | ins | ryp | 10+ | Mc | ↑ | | 15+ |
| 7.20 | | | | | ? | | | 9.04 | Mb? | | | 10+ | mb? | | | 10+ |
| 7.22 | | | | | Mc | ↑ | 10+ | 9.06 | N? | | | 15+ | ? | | | 15+ |
| 7.24 | | | | | F | fr | sepang | 15+ | 9.08 | Rs ? | | | | Rs | | | |
| 7.26 | | | | | Mb(?) | | | 9.10 | | | | | | | | |
| 7.28 | R | hang | | | ? | | | ? | 9.12 | | | | | | | | |

Right margin notes: until same GPS re; same tree ik; to tree ma

Left margin notes: eluar hang tke tol Pw; tree at south from N

**sosial**

| jam | siapa | buat apa | sama siapa |
|---|---|---|---|
| <510 sampai sarang | | | |
| 547 longcall; no response focals | | | |
| 556 kencing; don't know who (nest to left/south) →♂ | | | |
| 609 bersuara dalam N kanan (north); 610 kc (Ibu?); 611 berak Ibu? | | | |
| 611 + kencing anak? 612 Ibu? still berak; 613 again kc Ibu or Anak; 614 berak? | | | |
| berak samples taken - GPS → Nest; 628 sounds from south | | | |
| 652 A xx belly 653 I sar belly; 654 A ksy + missile; 658 A sar a lot | | | |
| kepala belly etc; missile uth obs again | | | |
| 701 I M out of tree first ♂ + A follow | | | |
| 706 again Cop (forced), Ibu seems to try to get away but ♂ holds her after 1 min Ibu is loose | | | |
| 1 min but ♂ puts her back in position, Cop again all this time high pitched sound with a bit bulged | | | |
| lips Ibu 7026 ♂ lets go, I straight away moves away; still Mt bertica; 713 I kc | | | |
| 714 ksy + missile A no idea to what; 716 A bites back of dead tree → Fryp Fe? 727 I moves out | | | |
| of tree branch brakes, she didn't fall down, branch got stuck ♂ watches | | | |
| 733 gets fr from N (all the time sitting) 716 longcall not far away 300m; no response focals (either ?) | | | |

| | pagi: anak di sarang ? | | ibu/sendiri |
|---|---|---|---|
| Jam | jarak ibu-anak | cuaca | pohon sama/lain |
| 6:00 | 0 | gelap mendung mira | sama |
| 6:30 | >2 | mendung | lain |
| 7:00 | 2-10 | mendung | lain |
| 7:30 | 2-10 | | lain |
| 8:00 | 2-10 | | sama |
| 8:30 | 2-10 | | |
| 9:00 | 0 | berawan | |

| Date: 23-8-07 | | | | | | | | Obs: Ellen, Mudin | | | | Cuaca: Berawan | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | Ibu: Lisa | | | | anak: Lilly | | | | Ibu: Lisa | | | | anak: Lilly | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi | jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.14 | Rs | | | 15↑ | Rs | | | 15+ | 10.58 | Ftal | Pr(M) | Puwin | 10↑ | Ftal | Pr(M) | Puwin | 10↑ |
| 9.16 | | | | | F | ins | ryp | | 11.00 | | | | | | | | |
| 9.18 | | | | | | | | | 11.02 | | | | | R | sit/APO? | | 5↑ |
| 9.20 | | | | | | | | | 11.04 | mt | | | | mt | ↑ | | |
| 9.22 | | | | | | | | | 11.06 | Mc | ↓ | | 5↑ | Mc | ↓ | | |
| 9.24 | | | | | | | | | 11.08 | mt | | | | mt | dau ibu | | |
| 9.26 | | | | | Rs | | | | 11.10 | F | ins | Smt | 0↑ | R | stand | peor | 0↑ |
| 9.28 | | | | | | | | | 11.12 | | | | | | | | |
| 9.30 | | | | | | | | | 11.14 | | | | | F | ins | Smt | 5↑ |
| 9.32 | | | | | | | | | 11.16 | | | | | mt | | | |
| 9.34 | | | | | | | | | 11.18 | | | | | mt | | | |
| 9.36 | | | | | Rs | | | | 11.20 | | | | | Mc | ↑ ? | | |
| 9.38 | | | | | | | | | 11.22 | Mc | ↑ | | | R | sit | | 10+ |
| 9.40 | | | | | | | | | 11.24 | mt | | | | | | | |
| 9.42 | | | | | | | | | 11.26 | ? | | | 5↑ | ? | | | 5↑ |
| 9.44 | | | | | | | | | 11.28 | Mb | | | 0↑ | F | v | resah | 1 |
| 9.46 | | | | | | | | | 11.30 | F | yl | ? | | F | ins | Smt | 10+ |
| 9.48 | | | | | | | | | 11.32 | mt | | LAPK | | | | | |
| 9.50 | | | | | | | | | 11.34 | mt | | | | | | | |
| 9.52 | | | | | | | | | 11.36 | R | hang | | | | | | |
| 9.54 | | | | | R | stand | peor ↓ in N | | 11.38 | Ftal | yl | akar | | mt | | | |
| 9.56 | | | | | N | | | | 11.40 | R | hang | | | Mb | | | |
| 9.58 | | | | | | | | | 11.42 | F | lv | akar resah puyo | 10↑ | Mc | ↑ | | |
| 10.00 | | | | | | | | | 11.44 | F | lv | akar | ↑ | F | | resah puyo | |
| 10.02 | | | | | Rs | | | | 11.46 | | | | | | | | |
| 10.04 | | | | | | | | | 11.48 | | | | | | | | |
| 10.06 | | | | | Voc +Ago | ksg+disply | | | 11.50 | | | | | | | | |
| 10.08 | | | | | Rs | | | | 11.52 | (op | | | 5↑ | ( | | | 5↑ |
| 10.10 | | | | | " | | | | 11.54 | | | | | Mb | | | |
| 10.12 | | | | | | | | | 11.56 | | | | | F | ins | Smt | 10↑ |
| 10.14 | | | | | | | | | 11.58 | | | | | Mc | | | |
| 10.16 | | | | | F? | ins | ryp | | 12.00 | | F | ins | Smt | | | | | |
| 10.18 | | | | | APM | (Mc) | up | | 12.02 | F? | P(M) | Puwin | 10↑ | Ftal? | Pr(M) | Puwin | 10↑ |
| 10.20 | | | | | F? | ins | ryp | | 12.04 | Ftal | P(M) | Puwin | | Ftal | P(M) | Puwin | |
| 10.22 | | | | | | | | | 12.06 | | | | | | | | |
| 10.24 | | | | | | | | | 12.08 | | | | 15↑ | | | | |
| 10.26 | | | | | N (sav) | | | | 12.10 | | | | | | | | 15↑ |
| 10.28 | | | | | APO disturb APO intag | | | | 12.12 | | | | | | ↳ | | |
| 10.30 | | | | | R | sit? | | 10↑ | 12.14 | | | | | | ↑ | | |
| 10.32 | | | | | F | ins | ryp (+kc) | | 12.16 | | | | | 20↑ | | ↳ | |
| 10.34 | | | | | | | | | 12.18 | | | | | | | | |
| 10.36 | | | | | APM | ↑m | ↳ | 15+ | 12.20 | | | | | | ↳ | | |
| 10.38 | | | | | F | ins | ryp | 10↑ | 12.22 | | | | | | ↳ | | |
| 10.40 | | | | | | | ryp | 15↑ | 12.24 | | | | | | ↳ | | |
| 10.42 | | | | | R? | diam at spot she went | | | 12.26 | | | | | | ↳ | | |
| 10.44 | Mc | keluar N | | | APM | Mc | | | 12.28 | | | | | | ↳ | | |
| 10.46 | R | sit | | | R? | | | | 12.30 | | | | | Fins | | | |
| 10.48 | Ftal | Pr(M) | Puwin? or R 10↑ | F/R | P(M) | Puwin | 10↑ | 12.32 | | | | | Rs | | | |
| 10.50 | Mb | Sm | 270° | | Mb | Sm | 270° | 1 | 12.34 | | | | | Rs | | | |
| 10.52 | R | hang | | 5↑ | APO | lv not really eating | | 5↑ | 12.36 | | | | | Ftals | | | |
| 10.54 | Ftal | Pl | resah puyo | | Ftal | Pl | resah puyo | | 12.38 | | | | | Rs | | | |
| 10.56 | mt | | Nort 3m | | mt | | | | 12.40 | | | | | | | | |

## SOSIAL

| jam | siapa buat apa sama siapa | | jam | jarak anak-ibu | cuaca | pohon sama/lain |
|---|---|---|---|---|---|---|
| | | | 9:30 | <2 | berawan | sama |
| | | | 10:00 | <2 | | |
| | | | 10:30 | >2 | | |
| | | | 11:00 | <2 | | |
| | | | 11:30 | >2 | | lain |
| | | | 12:00 | >2 | | |
| | | | 12:30 | >2 | | |

925 A N -936 ; 916-934 At first clearly F ryp, later occasionally heard bark biting + saw branches moving; could be APO as well, but I guess Fryp.

955 A buat N main lagi; 955 rusak throws down, start again. 20cm to right starts again as tries to pull (958) more branches in but 2 can't brake (bend) so finds others

1015 A keluar N ibu lagi, ke arah dia buat N tadi, Mc? either Fryp or buat N lagi; can't see it but still see branches moving so I guess Fryp

1019 sounds A is Fryp again; 1024 A masuk sarang again, removes + places back again mlk dau/ranting; moves around in N, throws mlk branch out, places another one back in again after taking it out 1027 keluar N lagi + turun 22r L; bawing ranting, own N goyang juga 1029 steps goyang; goyang could be to wake up Ibu but I am not sure because but nest Ibu is above N A boo.

1031 looking for F ryp again braking off pieces of bark; kc; 1034 I hear a sneeze, don't know from whom

1034 Why occasionally F ins also lots of AP moving around, goyang branches

1038 hear tree Moement (only 1x) from 200° <20m; 1043 again idem 1039 +1046 idem 2x +1053

1044 Ibu keluar sarang; A follows, 1045 Kc Ibi (...) - 1046 + berah; Ibu lookin direction sands (280°)

* see social notes!

| Date: 23-8-07 | | | | | | | | Obs: Ellen, Mudin | | | | | Cuaca: berawan | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ibu: Lisa | | | | anak: Lilly | | | | ibu: Lisa | | | | anak: Lilly | | |
| jam | kegia tan | item | jenis/ patch | tinggi | kegia tan | item | jenis/ patch | jam | kegia tan | item | jenis/ patch | tinggi | kegia tan | item | jenis/ patch tinggi |
| 12.42 | Ftol | fr.(M) | Puwin | 20+ | Ftd | fr.(M) | Puwin 20+ | 14.26 | Ftol | fr/sd | Cemenang | 15+ | | | Cemenang 15+ |
| 12.44 | | | | | | | | 14.28 | | | | | | | |
| 12.46 | | | | | | | | 14.30 | | | | | | | |
| 12.48 | g | | | | | | | 14.32 | Mb | | | 10+ | F | fr | Cemenang 15+ |
| 12.50 | | | | | | | | 14.34 | Mt/R | | | 5+ | | | |
| 12.52 | M | bridge | wait | 5+ | | | | 14.36 | Mt | | | 10+ | mc | | 10+ |
| 12.54 | Mt | | | 10+ | Mb | | 10+ | 14.38 | ? | | | | ? | | |
| 12.56 | Mt | bridge | | | Mb | | | 14.40 | | checking | Cemenang | | | checking Cemenang |
| 12.58 | F | lu | LAPK | 5+ | F | | | 14.42 | | | fr. | | | on ground |
| 13.00 | | | | | Ff | ins | smt | 14.44 | F | ins | smt | 10+ | F | ins | smt 15+ |
| 13.02 | | | | | | | | 14.46 | | | | | | | |
| 13.04 | Mt | | | | | | | 14.48 | | | | | | | |
| 13.06 | F | ins | ryp | | Mb | | | 14.50 | | | | | Mb | | |
| 13.08 | R | sit | | | F | ins | smt | 14.52 | | | | | F | fr.(½M) Puwin |
| 13.10 | R | hang/sit | | | | | | 14.54 | F | ins | smt tree | | | | |
| 13.12 | F | ins | smt tree | | Mb | | | 14.56 | | | | | | | |
| 13.14 | | | | | | | | 14.58 | F | ins | tree | 5+ | | | |
| 13.16 | | lu | LAPK | | Mt | via liana | 5+ | 15.00 | Ftol | ins | same tree | | | | 10+ |
| 13.18 | F | ins | smt | | ? | | | 15.02 | | | | | Mb | | 10+ |
| 13.20 | | | | | R | sit | peer | 15.04 | Mb | | | 10+ | Mt | | |
| 13.22 | | | | | N | | | 15.06 | Mt | ±20m | 350° | | Mb | | |
| 13.24 | | | | | | | | 15.08 | Mt | ? | | | Mt? | | |
| 13.26 | Mt + Voc | | | | ? Mb | | | 15.10 | Mb | 30m | 20° | 10+ | Mb | | |
| 13.28 | Voc/R | | | | R | hang | | 15.12 | mc | | | | Mb | | |
| 13.30 | | | | | | | | 15.14 | F | fr.(M) | Puwin | 15+ | F | fr.(M) Puwin |
| 13.32 | R | sit | | | R | sit | | 15.16 | Mt | | | 10+ | Mb | | |
| 13.34 | | | | | | | | 15.18 | Mt | | | 5+ | Mb | | 5+ |
| 13.36 | | | | | mc | ↑ | | 15.20 | F | lu | ahas | | R | hang | peer |
| 13.38 | | | | | ? | don't see | 10+ | 15.22 | R | hang | | | | stand | 4 legs |
| 13.40 | F | yl | resak payo | | ? R go hear | 5+ | 15.24 | | | | | Mb | | |
| 13.42 | | | | | ? anything | | 15.26 | ? | | | | | | 10+ |
| 13.44 | Mt | | | 5+ | Mb | | | 15.28 | ? | | | | Mt? | | 10+ |
| 13.46 | R | stand | seet peer | ?R | stand | peer 10+ | 15.30 | Mt | | | 5+ | F | fr.(M) mlk 15+ |
| 13.48 | | | | | R | sit | | 15.32 | R | sit + berah? | | | | | ? |
| 13.50 | | | | | ? | | | 15.34 | mc | ↑ | | | Mb | | 10+ |
| 13.52 | Mb | Ftol | ins smt | | ? | | | 15.36 | F?/R | sit | | | hang | | 5+ |
| 13.54 | F | ins | smt | | ? | | | 15.38 | F | lu | ahas | | mb/c | | |
| 13.56 | F | fr.(M) | Cemenang | 10+ | ? Ffr | Cemenang | 15.40 | F | lu | resak payo | | R | hang | |
| 13.58 | | fr.(M) | | | | | | 15.42 | Mt | | | | Mt | | |
| 14.00 | F | sit | | 10+ | R | hang | | 15.44 | F | lu | Qlias | 5+ | R sit / Fto as well 5+ |
| 14.02 | | | | | | | | 15.46 | | | | | R | hang | peer |
| 14.04 | | | | | mc | ↓ | | 15.48 | Mt | +kesa | | | Mt | | |
| 14.06 | | | | | R | sit | peer | 15.50 | R | stand | sit | | R | stand | |
| 14.08 | | | | | | | | 15.52 | mc | ↑ | | 0+ | R | hang | |
| 14.10 | R | hang | peer ♂ | 15+ | Ffr | F fr.(M) | 15.54 | R | sit | | 5+ | | | |
| 14.12 | | | | | mc ↑ | 15+ | 15.56 | R | hang | | | | hang | |
| 14.14 | | | | | F | fr.(M) Cemenang | 15.58 | F | ins | smt tree | | | hang | |
| 14.16 | Ftol | fr/sd | Cemenang | | sec data sex | 16.00 | R | sit | | | R sit R sit | |
| 14.18 | | | | | | | | 16.02 | R | hang | smt dry tree | | F | ins | smt tree liana |
| 14.20 | | | | | | | | 16.04 | | | | | R | hang | |
| 14.22 | | | | | | | | 16.06 | m? | | | | m? | | |
| 14.24 | | | | | | | | 16.08 | Ftol | fr.(M) | mlk | 15+ | Ftol | fr.(M) mlk 15+ |

**SOSIAL**

| jam | siapa | buat apa | sama siapa |
|---|---|---|---|
| 1313 | A has some trouble with swinging a liana to M forward as the liana is quite tight. Nevertheless after 5 swings she crosses over. | | |
| 1317 | I messed around in dry tree and got another ants nest. | | |
| 1318 | ♂ approaches I + peers while I is eating from fr. " | | |
| 1319 | than he comes down messes also around in dry tree + also gets ants N.  tinggi 7: N 5 resak payo | | |
| 1321 | A is making N again; again folding branches than this & than that | | |
| 1324 | A gigit rotting + puts it at the side of the N | | |
| 1325 | 5x ksg I + lastly mt away + littt  ♂ follows + I | | |
| 1326 | kc Ibu. again " ksg Ibu.; I hear goryles 100° (other medium) | | |
| 1328 | all keep quiet after ksg Ibu; 1329 I ksg 1x | | |
| 1330 | ksg I again 1x; A keeps in deadly position not-moving at all while hanging between 2 trees also; she is looking in direction 100° | | |
| 1333 | all stare in direction 100°; sit and seem to be hiding while the goryling goes on. | | |
| 1335 | ♂ sits now higher up + more in the open | | |
| 1336 | gibbons are vocalizing from same direction; still goryling can be heard.} | | |
| 1338 | I stops looking in direction 100°; bit later (seconds) goryling stops as well; gibbons are still Voc | | |
| 1339 | I Mt. | | |

| jam | jarak anak-ibu | cuaca | pohon sama/lain |
|---|---|---|---|
| 13:00 | >2 | berawan | lain |
| 13:30 | >2 | | sama |
| 14:00 | >2 | | sama |
| 14:30 | >2 | | sama |
| 15:00 | >2 | | lain |
| 15:30 | >2 | | lain? |
| 16:00 | <2 | | sama |

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Date: 23-8-07    Obs: Ellen, Mudin    Cuaca: mendung

ibu: Lisa    anak: Lilly     ibu: Lisa    anak: Lilly

| jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi | jam | kegiatan | item | jenis/patch | tinggi | kegiatan | item | jenis/patch | tinggi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.10 | Ftd | Pr.(M) | MLK | 10↑ | Ftd | Pr.(M) | MLK | 10↑ | 17.54 | R | hang | | 5↑ | F | Pr | tampa | 5↑ |
| 16.12 | R | hang | | 5↑ | R | hang | | 5↑ | 17.56 | | | | | M↑ | | | |
| 16.14 | ↑ | ↑ | | | | | | | 17.58 | Ftd | y↓ | resah | | C | peer | bn | |
| 16.16 | ↑ | ↑ | | | | | | | 18.00 | | | | | Ds | ?/C | | |
| 16.18 | R | sit | | | R | sit | | | 18.02 | | | | | F | y↓ | resah? | |
| 16.20 | | | | | | | | | 18.04 | | | | | | | | |
| 16.22 | mc | ↓ | | 5↑ | mc | ↓ | | 5↑ | 18.06 | R | hang | lade pry | | R | hang | pry | |
| 16.24 | Ftd | Pr.(M) | mlk | | Ftd | Pr.(M) | mlk | | 18.08 | | | | | | | | |
| 16.26 | F | lu | LAPK | 0↑ | R | hang | | | 18.10 | | | | | | | | |
| 16.28 | Ftd | y↓ | Resah | | | | | | 18.12 | | | | | | | | |
| 16.30 | | | | | F | y↓ | resah,pyp | | 18.14 | Mb | | | | Mb | | | |
| 16.32 | | | | | mc | ↓ | | | 18.16 | F | lu | ahar | | Mb | | | |
| 16.34 | | | | | F | Pr.(M) | Putih | 10↑ | 18.18 | R | sit | ooh,ma | 10' | | | | 10↑ |
| 16.36 | | | | | | | | | 18.20 | | | | | Ftd | Pr.(M) | Mlk | |
| 16.38 | M↑ | | | | | | | | 18.22 | N | | | | | | | |
| 16.40 | Fpulsi↓ | | syp | 5↑ | APM? | McL | | | 18.24 | | | | | | | | |
| 16.42 | | | | | F | Pr.(M) | Putih | | 18.26 | | | | | | | | |
| 16.44 | mb | | | | mb | | | 5↑ | 18.28 | R | top | | | | | | |
| 16.46 | .Mb/R | | | 10↑ | ? | mb/R | | 10↑ | 18.30 | | | | | | | | |
| 16.48 | M↑ | | | | M↑ | | | | 18.32 | ↑ | | | | mb? | | | |
| 16.50 | . | | | | ? | | | | 18.34 | Rs | ddk | | | mb | | | |
| 16.52 | F | lu | ahar | 5↑ | R | hang | | 5↑ | 18.36 | Rs | golek | | | APM | | | |
| 16.54 | → | | | | | | | | 18.38 | | | | | ↑ | | | |
| 16.56 | M↑ | | | 0↑ | M↑ | | | | 18.40 | | | | | R | hang | | |
| 16.58 | ? | | | | mc | ↑ | | 10↑ | 18.42 | | | | | ↑ | | | |
| 17.00 | R | hang | | | APM | ? | mtu/ML | 10↑ | 18.44 | | | | | ↑ | | | |
| 17.02 | Ftd | y↓ | resah | | F | Pr.(M) | Putih | | 18.46 | | | | | ↑ | | | |
| 17.04 | | | | | | | | | 18.48 | | | | | ↑ | | | |
| 17.06 | | | | | | | | | 18.50 | | | | | ?? | | | |
| 17.08 | | | | | | | | | 18.52 | | | | | } . | | | |
| 17.10 | | | | | | | | | 18.54 | | | | | Rs | | | |
| 17.12 | | | | | R | hang | | 5↑ | 18.56 | | | | | | | | |
| 17.14 | | | | | Ftd | y↓ | resah | | 18.58 | | | | | | | | |
| 17.16 | | | | | mb R | hang | | | 19.00 | | | | | | | | |
| 17.18 | | | | | mb | | | | 19.02 | | | | | | | | |
| 17.20 | | | | | F | y↓ | resah | 0↑ | 19.04 | | | | | | | | |
| 17.22 | M↑ | | | | mb | | | | 19.06 | | | | | | | | |
| 17.24 | Ft | y↓ | resah | | F | y↓ | resah | 0↑ | 19.08 | | | | | | | | |
| 17.26 | ? | | | | | | | | 19.10 | | | | | | | | |
| 17.28 | . | | | | . | | | | 19.12 | | | | | | | | |
| 17.30 | | | | | | | | | 19.14 | | | | | | | | |
| 17.32 | | | | | | | | | 19.16 | | | | | | | | |
| 17.34 | | | | | | | | | 19.18 | | | | | | | | |
| 17.36 | | | | | | | | | 19.20 | | | | | | | | |
| 17.38 | M↑ | | | 5↑ | M↑ | | | 5↑ | 19.22 | | | | | | | | |
| 17.40 | F | ins | syp | | mb | | | | 19.24 | | | | | | | | |
| 17.42 | m↑ dulu | | 10m', 160' | | mc | ↓ | | | 19.26 | | | | | | | | |
| 17.44 | R | hang | | | R | sit | | | 19.28 | | | | | | | | |
| 17.46 | R | sit | | 0↑ | ↑ | ↑ | | 0↑ | 19.30 | | | | | | | | |
| 17.48 | ↑ | hang | | 5↑ | ↑ | ↑ | | 5↑ | 19.32 | | | | | | | | |
| 17.50 | m↑ | | | | m↑ | | | | 19.34 | | | | | | | | |
| 17.52 | R | hang | | | F | Pr | tampu | | 19.36 | | | | | | | | |

>2

**sosial**

| jam | siapa | buat apa | sama siapa |
|---|---|---|---|
| 1629 | A | F y↓ resah pyp | |
| 1638 | I | besah? | |
| 1640 | I | F syp ...? | |
| 1643 | I | m↑ waits for 0↑ bersama m↑ | |
| 1644 | 0↑ pulls liana (1ks) put ahar end read in mouth | | |
| | pulls it up again. bites bit off (3 lu) | | |
| 1712 | branch brakes, A almost falls down but is fast enough to get | | |
| | to trunk | | |
| 1715 | A was looking at I + 0↑ | | |
| 1724-36 | didn't see it but very likely | | |
| 1719 | bersama F ins syp | | |
| † 1915 pulang pengamat → 0↑ jumpa rintis tag ① 800 after walking west from | | | |
| | the Nest. | | |

| jam | jarak anak-ibu | cuaca | pohon sama/lain |
|---|---|---|---|
| 16.30 | >2 | berawan | lain |
| 17.00 | >2 | | lain |
| 17.30 | <2 | | sama |
| 18.00 | 0 | mendung | sama |
| 18.30 | >2 | | sama / lain |
| 19.00 | <0 | | sama |
| 19.30 | | | |

1900 pulang

| Ibu (Anak + ♂) | Lisa (Lilly, Otto) | **sosial** | |
|---|---|---|---|
| jam | siapa | buat apa | sama siapa |

752 all the time while F puwin gibbons can be heard from 110°

753 as a plain flies over A looks for a moment but straight away keeps on F

80u ♂ kc ; 806 no begging A, maybe Ps but I think she is still loose from I though

806 A scr. really a lot +808

808 A peering I makan, no begging

810 A scr. kemakan. 811 A kc

812 all unripe puwin f, thrown down - in berak we see biji puwin but also on ground (baru spit out)

823 Someone sneezes; I queso it is the ♂

827 I+A contact O; A is at side Ds? both scr.

730 A again biting bark of tree

84u? seems A was begging suckfully htm I kc

859 A m to mon I moves lot down + turns back towards A - refusing to give susu! A peers + Ps?

901 I moves A follows

909 I couldn't see I+A from position where I was standing and moved. Now I see where I know they approx. are is a nest (big one) I don't see I or A. The ♂ build a N im away in same tree to the side at 907 I heard some sound as before during Cop. don't know whether they were Cop; Not of ♂ to side + underneath other N (I+A?)

913 From ... lug I hear high squealing sounds

915 really weird/funny : I is from the Nest waggling a branch I see her arm sort of bangling up and down with it.

916 I keluar + Fryp. ♂ was already Fryp from inside the N.

91u A waggling branch.

952 again I Flu Mlk (± 916 juga)

9u5 I that Mudin (sudah naik pohon)

953 A keluar sarang

1000 according to Mudin she F lu mlk menurut saya lebih menarik, she pulls It along side her mouth turns it 3 times

---

then puts it down. Gets again other branch puts faster down

1001 selesai; 1002 duduk lagi (before golek tuo?)

1002/3 golek lag. perut ke bawah 40° kepala - kaki

1006 2x kc.g Anak + goyang branch (display) dalam N while looking at us (though we were quiet and in same position for ± an hour already golek sekarang 330°

1007 keluar N, masuk N ibu

1051 A licks wrist

1057 F kulit kayut according to Mudin (ca13)

1103 Ibu kc; scratches kemakan

1104 MT (trying Ibu), A ... climbs up fast MT was not working A+I climb down.

1107 A kc

**1108** ♂ climbs on same dead tree as I+A I tries to turun ... really hesitantly Ibu eventually seems to have gotten what she wants as she is F smt from ant's nest; Anak is peering!

1111 A climbs sort of on back / behind back ibu - not really peering anymore I queso and at 1112 she turns her face other direction

**1113** Anak climbs down underneath ibu to peer again.

1114 A gets smt from other tree (from trunk still hear sounds from closeby; A is looking in that direction.

1116 A gets dead us (to F smt?)

1120 I F smt from ant's nest langsung w/mouth but also holding hand underneath + licking then off hand

1122 I looks direction ♂ M away 7.10m waits for a moment before M on all this time at ± D♂♂

1128 ♂ t seems to M with difficulty quite dense here and she pushes away branch before be able to pass (as she M low on ground, ♂ doesn't follow her there)

1132 again hear sounds from 250° →monyet

1138 the ♂ is eating desperately + FS

1140 longcall - again no response locals

11uu banyak daun, don't see locals clearly enough to be sure about what they are doing

---

♂ tidur 2u5°; di samping (side)

**Date:** 23-8-07    **Observer:** Ellen, Mudin

| Lisa (Lilly, Otto) | **sosial** | | |
|---|---|---|---|
| jam | siapa | buat apa | sama siapa |

1519 I F big lvs atras, on + A watch
from wli 2m.

1520 A scr belly, moves closer to F
closely peers but only for few
secs as I goes b.t down and
looks 280° where sounds come
from ~~old tdes the~~

1524 I now hear sounds from 150° and
0° + I look that way, longtailed
macaque as well

1534 macaque closeby F MM
Orangutans look at it

1537 A moves really fast to I
(afraid of macaques)

1530 I F lv atras [arrows drawn]
they M 70° 10m

1540 they are all (♂ + I) looking
in direction 0°, was also
a lsq from F no idea whatfor.
Mudin bilang ada suara pohon
bergerak.

1551 really nice site they all 3
sit in a row on a branch.
when ♂ was moving branch
sounded like braking + I turns
abt, A is watching F

1552 A berak - jatuh di air
D g25

1558 cough I

1602 according to mudin A
aside kau, I now several
times own head.

1613 Ds, im m lets go but stays close
and may have been Ds several x
- 16,17

1617 60° sounds pohon moving
again A slaps on own head
several x
♂ all this time stays low + quiet and
only M at 1720.

1656 A Mt multiple x + not bisa
than just lets herself fall onto
other tree

174 ♂ A scr but

1751 A F p. tampu

1754 other mawas approaches. 30~40°

---

1758 while other mawas approaches call 3
F yl

1759 other OU + 10m away
1xhsq.

1800 I coughs

1801 gets lo branch MM eats

1805 ♂ makesounds because F
other mawas looks at ou forals+
Mudin (10+

1807 ou stopped F

1809 A brakes off branch. Fryp

1809 other mawas approaches
30m 45°
our ♂ stops F ~~well~~ Mc+
to watch 45°

1811 NEW M b.t + now Mc↑ 15+

1813 A mauu, I M almost simut. ♂ follows

182, I begin N
she folds all branches from side in

1823 raspb+ putting them lawat mouth sm+
[tally marks] → bantal  leach

1826 golek

1827 ♂ masuk N I
~~Koo~~ Cop sounds I heard again
See ♂ still sitting
crying sounds us again as
well as high smash sounds
I still laying no B Bo+

1829 def Cop + before bergerak.
grpgrp ♂
forcefully 6op you see his body
R is going forward. I screams.
wat. ♂ bite hands g. acc. to mudin.

1831 sort of quiet.
gaah. sound ibu + screen (high)
party member < 10m like craw → gaah

1832 ♂ again gigits tangan
and while cop is looking at
party mem. I still n dress sounds
both " " come.

1833 I gets up. via back ♂
3 party members come

1834 ♂ sways N tree thelwas m, 22
I golek lagi.    Imd A ⊥ 2

1835 ♂ begins N

1837 A md 2. m, 22
37 party but N juga <10m.
39 F still rangs about N looking NEW
[month]

date: 23-8-07     obs: Ellen, Mudin

focal: Ibu (+ Anak + ♂) Lisa (Lilly, Otto)    **Approach/Leave - Mendekati/Menjauhi 10 - 50 m**

## Party for focal (< 50 m)

| Jam-start | Jam-end | Individuals | pair - pasang | jam | mendekati | jam | menjauhi | < 2 m? |
|---|---|---|---|---|---|---|---|---|
| | | | I + ♂ | 641 | I+A | 647 | I | 2 |
| N pag: | | I + ♂ : Lisa + Otto | | 649 | + | 649 | ♂ | 2 |
| N pagi | | I + A : Lilly + Lisa | | 652 | ♂ | 654 | I | 2 |
| N pagi | | A + ♂ : Lilly + Otto | | 654 | ♂ | 659 | I | 2 |
| | | | | 700 | ♂ | 704 | I | 2 |
| | | | | + 704 | ♂ | 710/11 | ♂ | 2 |
| | | | | 712 | I | 714 | ♂ | 2 |
| | | | | 714 | I | 714 | I + ♂ | 2 |
| | | | | 724 | ♂ | 727 | I | 2 |
| | | | | 728 | ♂ | < 735 | I | 2 |
| | | | | 737 | ♂ | 747 | ♂ | 2 |
| | | | | 742 | I | 743 | ♂ | 0 |
| | | | | 748 | I | 751± | ♂ | 2 |
| | | | | 845 | ♂ | 847? | I | 2 |
| | | | | 849 | ♂ | 850 | I | 2 |
| | | | | 851 | ♂ | 855 | ♂ | 2 |
| | | | | 905 | ♂ | 91044 | I | 2 |
| | | | | 1053 | ♂ | 1056 | ♂ I | 2 |
| | | | | 1057 | ♂ | 1058 | ? | 2 |
| | | | | 1106 | ♂ | 1106 | ♂ | 2 |
| | | | | 1108 | ♂ | 1108/g | ♂ | 2 |
| | | | | 1137 | ♂ | 1127 | ♂ | 10 |
| | | | | 1202 | ♂ | 1150 | ♂ | 2 |
| | | | | 1208/g | ♂ | 1203 | ? | 2 |
| | | | | 1214 | ♂ | 1212 | ♂ | 2 |
| | | | | 1318 | ♂ | 1222 | ♂ | 2 |

## Feeding rates- Kecepatan makan fokal / ibu

| Jam | Jenis | Lamanya (m;d) | Jumlah | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | < 1346 | ♂ | 1334/35 ♂ | 2 |
| | | | | A + ♂ | 650 | ♂ | 652 | ♂ | 2 |
| | | | | | 845 | ♂ | 847 | A | 2 |
| | | | | | 849 | ♂ | 850 | A | 2 |
| | | | | | 851 | ♂ | 855 | ♂ | 2 |
| | | | | | 1106 | ♂ | 1108/g | ♂ | 2 |
| | | | | | 1327 | ♂ | | | 2 |
| | | | | | tutu | | | | |
| | | | | | 1412 | A | 1414 | A | |
| | | | | | 1421 | A | 1431 | ♂ | 2 |

## Long Calls dikeluarkan ~~oleh Fokal~~

| Jam | Lamanya menit; detik | Jumlah pulsa | Ke arah | Sebab? | Catatan |
|---|---|---|---|---|---|
| 1140 | ±1,00 | 13 | 30° | no response | |

## Long Calls Didengar oleh Pengamat

| Jam | lamanya menit; detik | Jumlah pulsa | Dari arah | Jarak | Reaksi / Catatan |
|---|---|---|---|---|---|
| 544 | 1:26 | 32 | 50° | ±200m | high pitched, but beatiful longcall, no response focals whatsoever, everything remains quiet in the nests, though it seems de longcall came from not far away |
| 748? | 1:17 | 36 | 80° | ±300m | no response of either of the 3 focals, |
| 832 33 | 2:38 | 32 | 430° | 150m | they all keep on E. Puwin (c not even looking (at least not straight away or extensively) in the direction of the longcall |
| 1034 | 0:02 | 3 | 90° | ± then soon | No response Ibu, but I could only see her after 30 sec after longcall. ♂ not visible for me |

hardly heard Kangt 1Km

♂ at least ♂ start 5th eating focals

date: 23-8-07    obs: Ellen, Mudin

**focal:** Lisa (Lilly, Otto, New♂)

| Party for focal (< 50 m) | | | Approach/Leave - Mendekati/Menjauhi 10 - 50 m | | | | | |
|---|---|---|---|---|---|---|---|---|
| Jam-start | Jam-end | Individuals | pair - pasang | jam | mendekati | jam | menjauhi | < 2 m? |
| Npag | Nsore | Lisa + Otto | Lisa + Otto | | | 1353 | I | 2 |
| | | Lisa + Otto | | 1410 | I | 1436 I + I | | 2 |
| | | Lisa + Lilly | | 1436 | ♂ | 8454 see data | | |
| | | Lilly + Otto | | see data | | 1436 1444 ? > 1444 C2 | | |
| ±1750 | | New♂ + Lisa | | 1436 | ♂? | ± 1454 | ♂ | 2 |
| ±1750 | | New♂ + Lilly | | 1459 | ♂ | 1502 | I | 2 |
| ±1750 | | New♂ + Otto | | 1512 | I | 1535 | I | 2 |
| | | ↑ | | 1536 | ♂ | 1537 | I | 2 |
| | | | | ± 1542 | ♂ | 1551 | ♂ | 2 |
| | | could not be identified | | 1552 ? | ♂ | 1612 | ♂ | 2 |
| | | ↓ | | 1623 | I + A(♂) | 1637 | ♂ | 2 |
| | | no name | | 1639 | ♂ | 1644 | ♂ | 2 |
| | | | | 1706 | ♂ | 1721 | I | 2 |
| | | | | 1724 ± | ♂ | 1734 | I + A | 2 |
| | | | | 1740 | ♂ | 1744 | ♂ | 2 |
| | | | | 1744 | ♂ | 1747 | ♂ | 2 |
| | | | | 1750 | I | 1750 ? | ? | 2 |
| | | | | 1757 | ♂ | 1817 | ♂ | 2 |

| Feeding rates- Kecepatan makan fokal / ibu | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Jam | Jenis | Lamanya (m;d) | Jumlah | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | New♂ + Lisa, Lilly, Otto | 1803 NEW ♂ ±1833 '' | | 1813 | I + A + ♂ | 10 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | Lilly + Otto | 1626 | A (♂) | 1627 | A (♂) | 2 |
| | | | | | 1709 | A (♂) | 1721 | A | 2 |
| | | | | | 1724± | ♂ | 1739 | A | 2 |
| | | | | | 1740 | ♂ | 1740 | A | 2 |
| | | | | | 1744 | A | 1747 | ♂ | 2 |
| | | | | | 1750 | A | | | |

**Long Calls dikeluarkan oleh Fokal**

| Jam | Lamanya menit; detik | Jumlah pulsa | Ke arah | Sebab? | Catatan |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

**Long Calls Didengar oleh Pengamat**

| Jam | lamanya menit; detik | Jumlah pulsa | Dari arah | Jarak | Reaksi / Catatan |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Lisa (Lilly, Otto, New♂)

| Focal: 23-8-07 | | | | Tgl: 23-8-07 | | | | Obs: Ellen, Mudin | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Jam | party | | | Jam | party | | | Jam | party | |
| | <2 | 2-10 | 10-50 | | <2 | 2-10 | 10-50 | | <2 | 2-10 | 10-50 |
| 5.45 | | | | 10.30 | ♂ | A | | 15.15 | A | ♂ | |
| 5.50 | | | | 10.35 | | | | 15.20 | | | |
| 5.55 | | | | 10.40 | | | | 15.25 | | A | |
| 6.00 | A | ♂ +A | | 10.45 | | ♂ | | 15.30 | | | |
| 6.05 | | | | 10.50 | A | | | 15.35 | | | |
| 6.10 | | | | 10.55 | A+♂ | | | 15.40 | | ♂ | |
| 6.15 | +?A | | | 11.00 | A | ♂ | | 15.45 | A | ♂ | |
| 6.20 | | | | 11.05 | | A | | 15.50 | | | |
| 6.25 | | | | 11.10 | | | | 15.55 | A? | A? | |
| 6.30 | | ♂ +A | | 11.15 | ♂?? | ♂?? | | 16.00 | A? | A? | |
| 6.35 | | | | 11.20 | ♂?? | ♂?? | | 16.05 | | A | |
| 6.40 | A | ♂ | | 11.25 | | ♂ | | 16.10 | | | |
| 6.45 | A | ♂ | | 11.30 | | | | 16.15 | A | ♂ | |
| 6.50 | | A+♂ | | 11.35 | | | | 16.20 | A | | |
| 6.55 | ♂ | A | | 11.40 | ♂ | | | 16.25 | | ♂ A | |
| 7.00 | | A+♂ | | 11.45 | A | | | 16.30 | | | |
| 7.05 | ♂ +A | | | 11.50 | | | | 16.35 | | | |
| 7.10 | | | | 11.55 | | A | | 16.40 | | | |
| 7.15 | | ♂ + A | | 12.00 | | ♂ | | 16.45 | A | ♂ | |
| 7.20 | | A+♂ | | 12.05 | | A | | 16.50 | | | |
| 7.25 | ♂ | A | | 12.10 | ♂ | | | 16.55 | | | |
| 7.30 | ♂ | A | | 12.15 | | | | 17.00 | | ♂ A | |
| 7.35 | ♂ | ♂ + A | | 12.20 | | | | 17.05 | | | |
| 7.40 | ♂ | A | | 12.25 | | A+♂ | | 17.10 | ♂ | | |
| 7.45 | | ♂ + A | | 12.30 | | | | 17.15 | | | |
| 7.50 | ♂ | A | | 12.35 | | | | 17.20 | +A | | |
| 7.55 | | A+♂ | | 12.40 | | | | 17.25 | | | |
| 8.00 | | | | 12.45 | | | | 17.30 | | | |
| 8.05 | A | ♂ | | 12.50 | A | | | 17.35 | | | |
| 8.10 | A | ♂ | | 12.55 | A | | | 17.40 | | | |
| 8.15 | | A+♂ | | 13.00 | | A | | 17.45 | | | |
| 8.20 | | | | 13.05 | | | A?±10m | 17.50 | | | |
| 8.25 | A | ♂ | | 13.10 | A | | | 17.55 | | A, ♂ | New♂? |
| 8.30 | | | | 13.15 | A | | | 18.00 | A+♂ | | New♂ |
| 8.35 | | A+ | | 13.20 | | ♂ | | 18.05 | | A+New♂ | |
| 8.40 | | | | 13.25 | | | | 18.10 | A | | |
| 8.45 | ♂ + A | | | 13.30 | | A | | 18.15 | | A | New♂ |
| 8.50 | A | ♂ | | 13.35 | A | ♂ | | 18.20 | | ♂ | |
| 8.55 | A | | | 13.40 | A | | | 18.25 | | | |
| 9.00 | A | ♂ | | 13.45 | | | | 18.30 | ♂ | | |
| 9.05 | A+♂ | | | 13.50 | ♂ | | | 18.35 | A | New♂ ♂ | |
| 9.10 | A+♂ | | | 13.55 | | ♂ | | 18.40 | | | |
| 9.15 | | | | 14.00 | | | | 18.45 | | | |
| 9.20 | | | | 14.05 | A | | | 18.50 | | | |
| 9.25 | | | | 14.10 | ♂ | A | | 18.55 | | | |
| 9.30 | | | | 14.15 | | | | 19.00 | | | |
| 9.35 | | | | 14.20 | | | | 19.05 | | | |
| 9.40 | | | | 14.25 | A | | | 19.10 | | | |
| 9.45 | | | | 14.30 | | | | 19.15 | | | |
| 9.50 | | | | 14.35 | | A | | 19.20 | | | |
| 9.55 | | | | 14.40 | ♂?? | ♂?? | | 19.25 | | | |
| 10.00 | | | | 14.45 | ♂ | | | 19.30 | | | |
| 10.05 | | | | 14.50 | | | | 19.35 | | | |
| 10.10 | | | | 14.55 | | ♂ | | 19.40 | | | |
| 10.15 | | | | 15.00 | ♂ | | | 19.45 | | | |
| 10.20 | | | | 15.05 | A | ♂ | | 19.50 | | | |
| 10.25 | | | | 15.10 | | | | 19.55 | | | |

I = Ibu = Lisa ; A = Anak = Lilly   ♂ = Otto   NEW ♂₂ ?

| PERILAKU BERSARANG | | | | | | |
|---|---|---|---|---|---|---|
| **Focal Name:** Ibu (+Anak +♂) | | Siang A | Siang I | Siang A | Sore A | Pagi Besok I+A |
| Baru, Dipakai lagi, Diperbaiki? | | baru | B? | baru | baru | |
| Cuaca | | mendung | berawan | berawan | berawan | |
| GPS Reference | | N anak jm 730 | N siang jm 1000 | N siang jm 1000 | N siang jm 1000 | N pagi Em → ♂ + I+A |
| Party size at nest | | 3 | 3 | 3 | 2 | |
| Jam Buat | | 732 | ±906 | 935 | 956 | |
| Jam Selasai | | 733 | ±907 | 936 | 1001 | |
| Jenis Pohon sarang | | puwin | MLK | MLK | mlk | |
| Ketinggian pohon sarang | | 20 | 15 | 15 | 15 | |
| Ketinggian sarang diukur dari dasar sarang | | 19 | 13 | 13 | 12 | |
| Posisi sarang | | 3 (top?) | 1 (near batang) | 3 (top) | 2 | |
| Membawa daun ke dalam sarang? | | ✓ | tdk bawa | ✓ | yes tdk bawa | |
| Jam mengambil daun | | ✓ | ±916 + 922 | ✓ | 958 | |
| Jenis daun yang dibawa | | ✓ | MLK | ✓ | MLK | |
| Jarak asal daun ke sarang | | ✓ | 1m | ✓ | 0m | |
| **Nest Features (ada / tidak / tidak tau)** | | | | | | |
| Bantal | | ✓ | ? She built | ✓ | I guess not | |
| Selimut | | ✓ | ? N really lost so | ✓ | ✓ | |
| Atap | | ✓ | ? I guess semua | ✓ | ✓ | |
| Alas | | ? | ? tdk. | ✓ | ya | |
| Vocalisation? | | ✓ | 3 ✓ | ✓ 4 | ∫11 x rasp | |
| Menggigit ranting? | | ✓ | ? | ✓ | | |
| Arah tidur (kepala ke kaki) | | ✓ | ? | ? | 140° + 40° + 330° | |
| Jam Golek | | ✓ | ? 907 | 936 | 3x golek 957, 1002/3, 1006 | |
| **Pohon Pakan Terakhir** | Puwin | | | | | |
| Jarak ke pohon terakhir di makan | | sama | 5-10m | sama | sama | |
| Arah ke pohon terakhir di makan | | 0 | 300° | 0 | 0 | |
| Crop load pohon terakhir di makan | | | Puwin | ryp | ryp | |
| Crop load pohon sarang | | | MLK but don't know she got any | ryp | ryp | |
| **Perilaku Sosial** | | | | | | |
| Main-main dalam sarang? | | | ya | ✓ | ✓ | |
| Sarang khusus utk main main? | | | tdk I think | ✓ | ✓ | |
| Jarak sarang2 saat ada party | | | 1m ♂, 2m A | 2m I, 2m ♂ | <2m I, <2m ♂ | |
| **Besok** 23-8-07 pagi N (Simp D/Z) | | | Puwin | Rayap | | |
| Jam berangkat dari sarang | | 734 | 10:44 | | 10:05 | 610 I  612 A |
| Jarak ke pohon pertama di makan (pagi) | | sama | | | | 5m (incl naik pohon) |
| Arah ke pohon pertama di makan | | 0 | | | | go° |
| Crop load pohon pertama di makan | | Puwin | | | | Puwin. |
| **Pembelajaran sosial Ibu-anak** | | | | | | |
| Ibu-anak satu/lain sarang? | | ✓ | 1 | lain. | lain | 1 |
| Jarak sarang ibu dari anaknya | | ✓ | ✓ | 2 m | 1m | |

| Jam | Jarak anak dari Ibu | Aktivitas Anak | Keterangan |
|---|---|---|---|
| |  | | 9:09 - Copulation sounds from nest |
| | | | 10:07 Anak enters nest Ibu |
| | | | 9:55 - Anak builds nest - throws down branches & starts again. |
| | | | Pulls more branches in but cant break them looks for others. 10:15 leaves Ibu nest |
| | | | 10:19 tries to break branches again for another nest. |
| | | | 10:24 A enters nest again, removes branches + puts back again mlk daun/ranting, moves around in nest, throws mlk branch out & places another back in after taking it out. 10:27 leaves nest |

**Date:** 23-8-07

**Observers:** Ellen, Mudin

**Nest Reference Number:**

I=Ibu=Lisa   A=Anak=Lilly   ♂=Otto   NEW♂=?

## PERILAKU BERSARANG

**Focal Name:** Ibu (+ Anak + ♂)    Sore ♂   New Party ♂

| | Siang A | Siang | Siang Sore | Sore I | Pagi Besok |
|---|---|---|---|---|---|
| Baru, Dipakai lagi, Diberbaiki? | ? | baru | | baru | |
| Cuaca | berawan | berawan | berawan | berawan | |
| GPS Reference | Jm 1230 Fpw | Nsore-Cop-Party visible | Nsore-Cop-Party | Nsore-Cop=party | |
| Party size at nest | 3 | 5 | 5 visible | 4/6 | |
| Jam Buat | 1210-1224 | 1835 | 1837 | 1821 | |
| Jam Selasai | " " | | ±1853 | 1826 | |
| Jenis Pohon sarang | Puwin | see data | | resah pujo | |
| Ketinggian pohon sarang | 17 | } Mudin | } tdk lihat | 7 | |
| Ketinggian sarang diukur dari dasar sarang | 15 | | | 6 | |
| Posisi sarang | 1 | | | 3 top | |
| Membawa daun ke dalam sarang? | | − | | − | |
| Jam mengambil daun | } don't think so | − | } tdk lihat | − | |
| Jenis daun yang dibawa | | − | | − | |
| Jarak asal daun ke sarang | | − | | − | |
| **Nest Features (ada / tidak / tidak tau)** | | | | | |
| Bantal | } | ya | } | ya | |
| Selimut | | − | } tdk lihat | − | |
| Atap | ? | − | | − | |
| Alas | ° | ya | | ? | |
| Vocalisation? | | 7x | 2x ? | ya 15x rasp mouth +branches twist while making pillow | |
| Menggigit ranting? | | ya | ? | tdk | |
| Arah tidur (kepala ke kaki) | | } see data Mudin | } tdk lihat | 240° | |
| Jam Golek | | | ±1852 | 1026 I  A between 1846 - 1853 | |
| **Pohon Pakan Terakhir** | | | | | |
| Jarak ke pohon terakhir di makan | 0 | } see | } | 320 | |
| Arah ke pohon terakhir di makan | 0 | } data | } ? | ♂ m. | |
| Crop load pohon terakhir di makan | Puwin | } Mudin | | yl ♀ esak | |
| Crop load pohon sarang | Puwin | | | lu. resah pujo. | |
| **Perilaku Sosial** | | | | | |
| Main-main dalam sarang? | ✓ | ✓ | ✓ | Cop. | |
| Sarang khusus utk main main? | ✓ | ✓ | ✓ | tdk saya rasa - terpisah | |
| Jarak sarang2 saat ada party | | 5m I | 7m I | 5m + 7/lbm. | |
| **Besok** | | 8gm NEW♂ | 9m ♂ | ♂ NEW♂ | |
| Jam berangkat dari sarang | | | | | |
| Jarak ke pohon pertama di makan (pagi) | | | | | |
| Arah ke pohon pertama di makan | | | | | |
| Crop load pohon pertama di makan | | | | | |
| **Pembelajaran sosial Ibu-anak** | | | | | |
| Ibu-anak satu/lain sarang? | ✓ | ✓ | ✓ | 1 | |
| Jarak sarang ibu dari anaknya | ✓ | ✓ | ✓ | ✓ | |

| Jam | Jarak anak dari Ibu | Aktivitas Anak | Keterangan |
|---|---|---|---|
| | | | 18:27 ♂ enters I's nest - copulation sounds heard |
| | | | |
| | | | 18:34 ♂ leaves I's nest |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Lisa & Lilly

| mendekati/menjauhi ibu + anak (mother+infant only) | | | | | | | kecepatan makan anak | | | | |

| 2 m | | | | 10 m | | | | kecepatan makan anak | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| jam | yg md | jam | yg mj | jam | yg md | jam | yg mj | Jam | Jenis | masak/ mentah | lamanya m; d | Jumlah |
|  |  | 610 | I | 1300 ¹³¹⁰⁷ A | | 1308⁴ | I |  |  |  |  |  |
| 612 | A | 627?* | A |  | | 1431 | I |  |  |  |  |  |
| 640 | I | 641 | I | not sure whether < or > 10 | | | |  |  |  |  |  |
| (640 640) | | | | edge . | | | |  |  |  |  |  |
| 645 | A | 645² | I |  | | | |  |  |  |  |  |
| 648 | A | 649 | I |  | | | |  |  |  |  |  |
| +704 | A | 710 | I |  | | | |  |  |  |  |  |
| 714 | A | 714⁰ | I |  | | | |  |  |  |  |  |
| 805 | A⁽⁰⁺²⁾ | 808 | I⁽⁰⁾ |  | | | |  |  |  |  |  |
| 808 | A⁽⁰⁾ | 808 | I⁽⁰⁾ |  | | | |  |  |  |  |  |
|  |  | 808¹² | I⁽²⁾ |  | | | |  |  |  |  |  |
| 825 | A⁽⁰⁺²⁾ | 827 | I⁽⁰⁾ |  | | | |  |  |  |  |  |
| 827 | A⁽⁰⁾ | 829 | I⁽⁰⁺²⁾ |  | | | |  |  |  |  |  |
| 829 | A⁽²⁾ | 830 | I⁽²⁾ |  | | | |  |  |  |  |  |
| 841 | A⁽⁷⁺⁰⁾ | 843 | I₂⁽⁰⁾ |  | | | |  |  |  |  |  |
| 844 | A⁽⁰⁾ | 847 | A⁽⁰⁾ |  | | | |  |  |  |  |  |
| 847 | A⁽⁰⁾ | 848 | A⁽⁰⁾ |  | | | |  |  |  |  |  |
| 848 I | | | |  | | | |  |  |  |  |  |
| 858 | A⁽⁰⁾ | 900 | I⁽⁰⁾ |  | | | |  |  |  |  |  |
| 901 | A⁽⁰⁾ | 901 | I⁽⁰⁾ |  | | | |  |  |  |  |  |
| 906 | A⁽²⁾ | 902 | A⁽²⁾ |  | | | |  |  |  |  |  |
| 1035 | A⁽²⁾ | 1029 | A⁽⁰⁾ |  | | | |  |  |  |  |  |
| 1045 | I | 1036 | A⁽²⁾ |  | | | |  |  |  |  |  |
| 1103 | A | 1102 | A⁽²⁾ |  | | | |  |  |  |  |  |
| 1104 | A | 1104 | A |  | | | |  |  |  |  |  |
| 1110 | A | 1114 | A |  | | | |  |  |  |  |  |
| 1142 | A | 1153 | A | 2m | | | |  |  |  |  |  |
| 1150 | A | 1159 | A |  | | | |  |  |  |  |  |
| 1247 | A | 1257 | I | 1756 | A | 1801 | A |  |  |  |  |  |
| 1252 | A | 1256/7 | I? | 1810 | A | 1814? | A |  |  |  |  |  |
| 1315 | A | 1326 | I | 1834 | A | 1837 | A |  |  |  |  |  |
| 1332 | A⁽²⁺⁰⁾ | 1335 1336 | A⁽⁰⁾ A⁽²⁾ | 1837 | A |  | |  |  |  |  |  |
| 1343 | I | 1344 | A | <1853 | A⁽⁰⁾ | | |  |  |  |  |  |
| 1402 | A | 1409? | I |  | | | |  |  |  |  |  |
| 1412 | A | 1414 | A |  | | | |  |  |  |  |  |
| 1421 | A | 1431 | I⁽²⁾ |  | | | |  |  |  |  |  |
| 1503 | A | | |  | | | |  |  |  |  |  |
| 1530 | A⁽⁰⁾ | 1523 | I+A⁽⁰⁺²⁾ |  | | | |  |  |  |  |  |
| 1537 | A⁽⁰⁺²⁾ | 1530 | I |  | | | |  |  |  |  |  |
|  |  | | |  | | | |  |  |  |  |  |
| 1541 | A | 1551 | A |  | | | |  |  |  |  |  |
| 1552 | A | ? 1600 | ?* |  | | | |  |  |  |  |  |
| 1617 | A⁰ again | 1622 | I |  | | | |  |  |  |  |  |
| <1612 | A⁰ also | 1617 | A |  | | | |  |  |  |  |  |
| 1626 | | 1624 | I |  | | | |  |  |  |  |  |
|  |  | 1627 | A |  | | | |  |  |  |  |  |
| 1645 | A | <1656 | A |  | | | |  |  |  |  |  |
| 1719 | A | 1740 | A |  | | | |  |  |  |  |  |
| 1742 | A+I | 1743 | A |  | | | |  |  |  |  |  |
| 1744 | A+I | ±1750 | A+I? |  | | | |  |  |  |  |  |

* didn't see anak going off and from 612-626 I was getting berale sample
but at 626 I thought I saw A still C + begging