Table S1. Total duration [s] of rescue behaviour displayed by individual workers of the red wood ant *Formica polyctena* (WL- ants, *n* = 17) in response to a nestmate victim entrapped in an artificial snare. WL- ants: ants that engaged in rescue behaviour directed to the victim’s body (b) or to the substrate in its vicinity (s), but never directed it to any of the wire loops (WL) placed on the victim’s body. The values of the total duration of rescue behaviour are presented in ascending order. Each ant is identified by the number of the test in which it participated and the first letter of the name of its colour mark (b: blue, g: green, r: red, v: violet, y: yellow).

|  |  |
| --- | --- |
| Ant | Total duration [s] of rescue behaviour[rescue attempts directed to the victim’s body (b) and to the substrate (s) near the victim] |
| 11g | 0.08 |
| 10g | 0.72 |
| 6g | 1.36 |
| 11y | 1.76 |
| 3r | 2.84 |
| 2v | 3.48 |
| 14y | 3.84 |
| 6v | 5.80 |
| 16g | 6.72 |
| 6r | 7.28 |
| 10r | 7.52 |
| 7b | 9.00 |
| 6b | 17.12 |
| 9v | 20.76 |
| 7g | 28.32 |
| 8b | 88.88 |
| 24v | 153.88 |

Table S2. Successive subcategories of rescue behaviour displayed by individual workers of the red wood ant *Formica polyctena* (WL- ants, *n* = 17) in response to a nestmate victim entrapped in an artificial snare. The sequences of bouts of two main types of rescue attempts (1-8 elements; number of elements of each sequence is indicated in parentheses) are presented in ascending order. If successive bouts of the same subcategory of rescue behaviour were not separated by behaviour belonging to another subcategory of rescue attempts, they are represented as a single element of the sequence even if they were interspersed by bouts of behaviour not consisting of rescue attempts. Other explanations as in Table S1.

|  |  |
| --- | --- |
| Ant | Successive subcategories of rescue behaviour (b *vs* s) |
| 3r | s (1) |
| 6b | s (1) |
| 6g | s (1) |
| 6r | s (1) |
| 6v | s (1) |
| 7b | s (1) |
| 7g | s (1) |
| 9v | s (1) |
| 10r | s (1) |
| 11g | s (1) |
| 11y | s (1) |
| 10g | b (1) |
| 14y | b (1) |
| 16g | b (1) |
| 2v | b (1) |
| 8b | bsbsbsb(7) |
| 24v | bsbsbsbs (8) |

Table S3. Total duration [s] of rescue behaviour and of its two main subcategories displayed by individual workers of the red wood ant *Formica polyctena* (L ants, *n* = 12) in response to a nestmate victim entrapped in an artificial snare. L ants: ants that at least once directed their rescue attempts to the wire loop on the victim’s leg (L), but never directed them to the wire loop on the victim’s petiole. b, s, L: rescue attempts directed, respectively, to the victim’s body (b), to the substrate near the victim (s), and to the wire loop on its leg (L). The values of the total duration of all subcategories of rescue behaviour pooled together are presented in ascending order. Other explanations as in Table S1.

|  |  |  |  |
| --- | --- | --- | --- |
| Ant | Total duration [s]of all subcategories of rescue behaviour pooled together | Total duration [s] of rescue behaviour directed to the victim’s body or to the substrate near the victim (b+s) | Total duration [s]of rescue behaviour directed to the wire loop on the victim’s leg (L) |
| 25v | 5.60 | 0 | 5.60 |
| 18v | 6.24 | 3.80 | 2.44 |
| 19v | 12.55 | 1.47 | 11.08 |
| 13v | 22.12 | 20.48 | 1.64 |
| 1r | 40.80 | 24.08 | 16.72 |
| 5b | 73.20 | 70.28 | 2.92 |
| 17v | 157.49 | 144.69 | 12.80 |
| 21b | 188.72 | 157.84 | 30.88 |
| 3g | 359.44 | 327.72 | 31.72 |
| 4y | 453.04 | 383.96 | 69.08 |
| 10v | 659.58 | 521.58 | 138.00 |
| 19r | 1097.58 | 926.58 | 171.00 |

Table S4. Successive subcategories of rescue behaviour displayed by individual workers of the red wood ant *Formica polyctena* (L ants, *n* = 12) in response to a nestmate victim entrapped in an artificial snare. The sequences of bouts of various types of rescue attempts (1-75 elements; number of elements of each sequence is indicated in parentheses) are presented in ascending order. Other explanations as in Tables S2 and S3.

|  |  |
| --- | --- |
| Ant | Successive subcategories of rescue behaviour  |
| 25v | L (1) |
| 3g | Lb (2) |
| 19v | Ls (2) |
| 18v | bL (2) |
| 1r | bLbsb (5) |
| 5b | bLsbs (5) |
| 13v | sbLsbs (6) |
| 17v | bsbLsbsL (8) |
| 21b | bsbLbsbsbsLsbsb (15) |
| 4y | bLbLbLbLbLbLbsbLbsbs (20) |
| 10v | bsbsbsbsbsbsbsbsLsLsbsLsLsbLsLbsbsbsbsbsbsbsbsbsbs (51) |
| 19r | sbLsbsbLbsLbsbsbsbsLsLsLsLsbsbLbsbsLbLsLbsLsbLsbsbLsbsLbsbsbsbsbsbsbsLsbsbL (75) |

Table S5. Total duration [s] of rescue behaviour and of its three main subcategories displayed by individual workers of the red wood ant *Formica polyctena* (L+P ants, *n* = 12) in response to a nestmate victim entrapped in an artificial snare. L+P ants: ants that directed their rescue attempts to both wire loops placed on the victim’s body, the one on its leg (L) and the one on its petiole (P). b+s, L, P, L+P: rescue attempts directed, respectively, to the victim’s body (b) and the substrate near the victim (s), to the wire loop on the victim’s leg (L), to the wire loop on the victim’s petiole (P), and to both wire loops on the victim’s body. The values of the total duration of all subcategories of rescue behaviour pooled together are presented in ascending order. Other explanations as in Table S1.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Ant | Total duration [s] of all subcategoriesof rescue behaviour pooled together | Total duration [s] of rescue behaviour directed to the victim’s body and to the substrate near it (b+s) | Total duration [s] of rescue behaviour directed to the wire loop on the victim’s leg (L) | Total duration [s] of rescue behaviour directed to the wire loop on the victim’s petiole (P) | Total duration [s] of rescue behaviour directed to both wire loops on the victim’s body (L+P) |
| 14g | 39.60 | 27.52 | 3.28 | 8.80 | 12.08 |
| 9b | 212.28 | 184.76 | 24.28 | 3.24 | 27.52 |
| 22b | 344.84 | 212.08 | 124.96 | 7.80 | 132,76 |
| 13r | 345.04 | 325.32 | 13.60 | 6.12 | 19.72 |
| 13y | 432.62 | 237.26 | 128.28 | 7.08 | 195.3 |
| 6y | 445.34 | 337.42 | 65.64 | 42.28 | 107.92 |
| 7y | 451.28 | 408.72 | 3.40 | 39.16 | 42.56 |
| 12y | 455.72 | 392.44 | 35.04 | 28.24 | 63.28 |
| 11v | 625.27 | 538.11 | 58.24 | 28.92 | 87.16 |
| 4g | 665.82 | 610.14 | 48.16 | 7.52 | 55.68 |
| 3y | 731.52 | 369.28 | 31.00 | 331.24 | 362.24 |
| 10b | 806.93 | 767.97 | 14.40 | 24.56 | 38.96 |

Table S6. Successive subcategories of rescue behaviour displayed by individual workers of the red wood ant *Formica polyctena* (L+P ants, *n* = 12) in response to a nestmate victim entrapped in an artificial snare. b, s, L, P: rescue attempts directed, respectively, to the victim’s body (b), to the substrate in its vicinity (s), to the wire loop on its leg (L), and to the wire loop on its petiole (P). The sequences of bouts of various types of rescue attempts (6-72 elements; number of elements of each sequence is indicated in parentheses) are presented in ascending order. Other explanations as in Tables S2 and S5.

|  |  |
| --- | --- |
| Ant | Successive subcategories of rescue behaviour  |
| 14g | PbPbLb (6) |
| 9b | bLbsbLbLbsbsbP (14) |
| 4g | bLbPLb LbL bLb LbL (15) |
| 22b | bLbLbLbPbLbLbsbsb (17) |
| 3y | sbsbsbsLbsbsLbsPsbLbPb (22) |
| 13r | sbsbPsbsbsbsbsbsLbsbsbsbsLsbsbsbsbsbPb (38) |
| 7y | bPbsbsbsbsbsbsbsbsbsbPbsPsbsPLPbsbsbsbs (39) |
| 10b | sPbsbPsbsbsbsbPbPbPbsbsbsbsbLbsbsbsbPbsbsb (42) |
| 12y | sLbsbsLsbsbsbsbsbsbsbsbsPsPsbsLbLsbsbsbsLbs (43) |
| 13y | bsbPbsPsbsPbPLbsbPsbPbsbsbsbLsLbsbsbsLsbsbsbsbL (47) |
| 11v | sbPbLPsLbPbsbLsbsbsbsbsbsbsbsbsLPsLsPbsLsbsbPsPbsbsLsLsbs bsLbsbsbsbsbsb (71) |
| 6y | PbPbsbLPbLbsbLbPbPsLbPbsbsbLbPbLbLbPbsbsbLbLbPbLbLbPbP bLbPbLbLbPLbPbsbLb (72) |

Table S7. Total duration [s] of rescue behaviour and of its two main subcategories displayed by individual workers of the red wood ant *Formica polyctena* (P ants, *n* = 12) in response to a nestmate victim entrapped in an artificial snare. P ants: ants that at least once directed their rescue attempts to the wire loop on the victim’s petiole (P), but never directed them to the wire loop on the victim’s leg. b, s, P: rescue attempts directed, respectively, to the victim’s body (b), to the substrate near the victim (s), and to the wire loop on its petiole (P). The values of the total duration of all subcategories of rescue behaviour pooled together are presented in ascending order. Other explanations as in Table S1.

|  |  |  |  |
| --- | --- | --- | --- |
| Ant | Total duration [s]of all subcategories of rescue behaviour pooled together | Total duration [s] of rescue behaviour directed to the victim’s body or to the substrate near the victim (b+s) | Total duration [s]of rescue behaviour directed to the wire loop on the victim’s petiole (P) |
| 15v | 7.36 | 3.80 | 3.56 |
| 20v | 10.08 | 6.68 | 3.40 |
| 12v | 22.80 | 21.56 | 1.24 |
| 10y | 32.84 | 29.56 | 3.28 |
| 1v | 44.72 | 42.32 | 2.40 |
| 15g | 73.80 | 59.92 | 13.88 |
| 17r | 82.16 | 81.12 | 1.04 |
| 20g | 138.56 | 126.52 | 12.04 |
| 23b | 144.32 | 142.12 | 2.20 |
| 1b | 182.12 | 132.92 | 49.20 |
| 12g | 198.16 | 193.76 | 4.40 |
| 2r | 753.72 | 639.32 | 114.40 |

Table S8. Successive subcategories of rescue behaviour displayed by individual workers of the red wood ant *Formica polyctena* (P ants, *n* = 12) in response to a nestmate victim entrapped in an artificial snare. The sequences of bouts of various types of rescue attempts (2-45 elements; number of elements of each sequence is indicated in parentheses) are presented in ascending order. Other explanations as in Tables S2 and S7.

|  |  |
| --- | --- |
| Ant | Successive subcategories of rescue behaviour  |
| 15v | bP (2) |
| 20v | bP (2) |
| 12v | sbPs (4) |
| 17r | bPbsb (5) |
| 1v | bsbPb (5) |
| 15g | PbPbPb (6) |
| 10y | bsbsbPb (7) |
| 20g | bPbPbPsbs (8) |
| 1b | bPbsbsbsPbsbsbsbsbPbPsP (23) |
| 12g | bsbsbsbsbPsbsbsPsbsbsbsbs (25) |
| 23b | sbsPsbsbsbsbsbsbsbsbsbsbsb (26) |
| 2r | bsbsbsbsbsbsbsbsbsbsbsbsbsbsbsbsbPbPbPbPsbPsb (45) |