

### Appendix 3. Online videos

**Video S1.** Possible copulation attempt. The male is at the nest; the female arrives carrying moss. The male mounts the female, who drops the moss, and he attempts to hold her by feathers of her right carpus. The both fly out of the camera frame (7 June 2021, 04:54:28 hr).

<https://zenodo.org/record/6927779#.Yz2CQLTMJck>

**Video S2.** Nest-building. The male is on the nest; the female arrives with moss, searches for a place to place it, and incorporates it along the front rim of the nest by driving it into the nest with her beak and rapid back-and-forth head movements (11 June 2021, 03:02:37 hr). 43.9 MB, .mp4 file, VLC Media

Player.[https://zenodo.org/record/6927864#.Yz2C\\_7TMJcl](https://zenodo.org/record/6927864#.Yz2C_7TMJcl)

**Video S3.** Female laying egg (24 June 2021, 11:37:26 hr). 32.2 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6927916#.Yz2DEbTMJck>

**Video S4.** Female ingesting fecal sac. The 3-day-old chick, still with no semiplumes, positions cloaca near rim of nest, and produces a fecal sac which the adult immediately eats (24 July 2021, 08:57:57 hr). By age 7 days the chick was able to extend posterior past the nest rim and project feces away from the nest. 13.7 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6927948#.Yz2DPbTMJck>

**Video S5.** Female feeding 1-day-old chick. The adult backs off the brooded chick. The altricial hatchling is able to elevate head and beg with open mouth. Female feeds small individual portions to the hatchling. Eggshells still present in nest; they were never ingested or removed from the nest (22 July 2021, 18:26:16 hr). 44.2 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6927973#.Yz2DZrTMJck>

**Video S6.** Male feeding chick at 13 days. Adult's esophageal bolus visible. Portions of bolus brought into throat which bulges, adult gapes several times before "pumping" insects into nestling. Semiplumes have erupted over most of the nestling's body (3 August 2021, 19:07:20 hr). 26.3 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6928000#.Yz2DsbTMJck>

**Video S7.** Nestling wing exercises. At age 24 days, nestling faces back of nest and intermittently flaps and rests outstretched wings (14 August 2021, 18:11:05 hr). 16.5 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6928029#.Yz2DzrTMJck>

**Video S8.** Nestling wing exercises. At age 50 days, the nestling moved to the rocks below the nest to exercise wings and crawled back to nest. Intermittently flapped and rested wings (9 September 2021, 17:43:40 hr). 35.0 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6928047#.Yz2D7LTMJck>

**Video S9.** Fledging. The nestling fledged on day 51. The male was last seen 8 September; the female left the nest 15 minutes after chick fledged. None of the birds were seen again (10 September 2021, 05:14:40 hr). 4.72 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6928083#.Yz2ED7TMJck>

**Video S10.** Preening. Male in nest covering nestling; female perched on rocks below nest engaging in stretching and preening (17 August 2021, 01:15:07 hr). 28.2 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6928131#.Yz2ELLTMJck>

**Video S11.** Beak tussles. The female is on the left, male on the right. Both adults engaged in pecking each other (23 June 2021, 03:42:02 hr). 4.96 MB, .mp4 file, VLC Media Player.

<https://zenodo.org/record/6928168#.Yz2ETLTMJck>