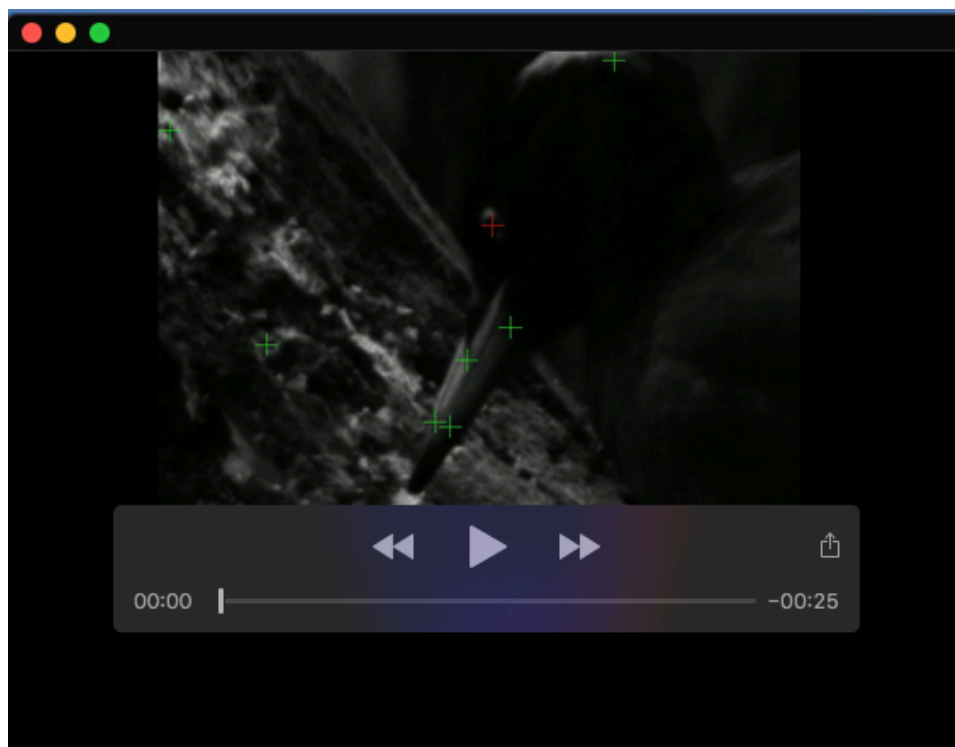
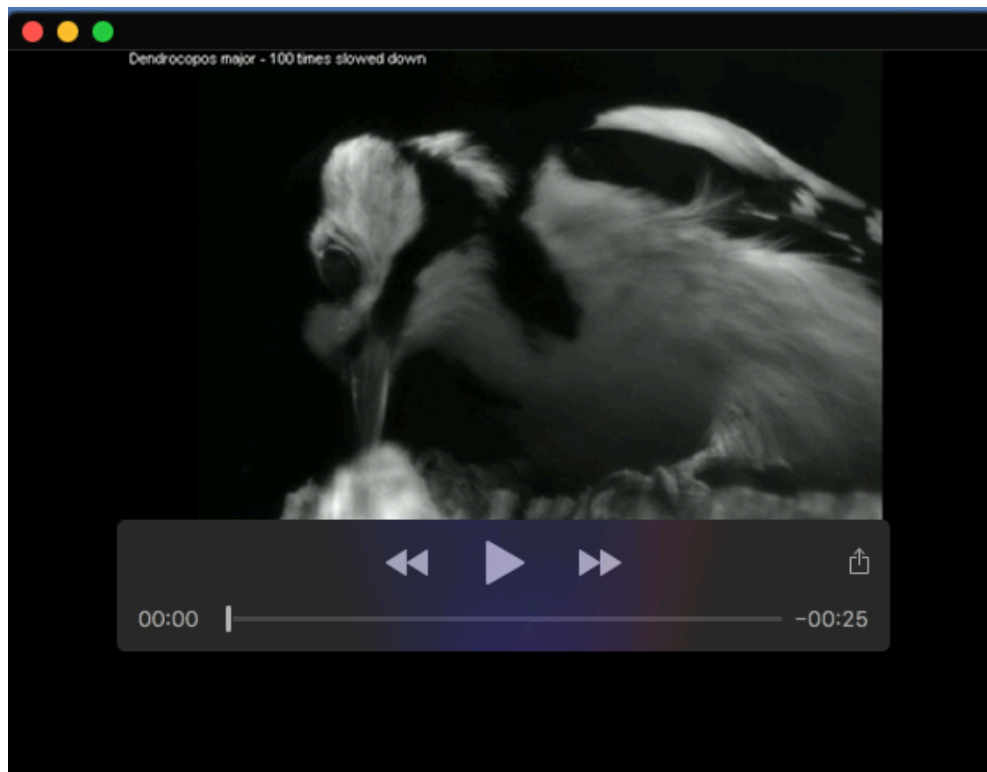




Movie 1. Slow-motion replays of high-speed videos showing the characteristic beak movement pattern during head retraction in *Dryocopus martius*.



Movie 2. Animation of the tracked landmarks and rigid body movement inferred from these landmarks during beak retrusion in *Dryocopus martius*.



Movie 3. Slow-motion replay of a high-speed video showing beak movements during beak retraction in great-spotted woodpecker *Dendrocopos major* which strongly resemble those described for the black woodpecker.