



Teacher background information

Flies live for approximately 2-3 weeks during summer but up to 3 months in winter. They have been known to travel up to 30 km/day however they will only do so if they are looking for resources, i.e. food. Flies have been found 1600km from their original habitat.

A batch of fly eggs will generally number around 200. Flies will lay between 200-500 eggs in their lifetime (species dependent). Flies are generally not active at night.

The larvae feed on the bacteria that decompose the corpse. Hairy maggots will predate on smooth maggots but only if other food is not available.

Primary strike flies are attracted to a corpse within 4 hours. Flies are usually buzzing around people but as we are moving, blow flies do not land on us. We stop moving if we are dead, drunk or concussed (not sleeping).

Secondary strike flies are attracted to corpses after approximately 4 days. Corpses at this stage are very smelly due to bloat, putrefaction and fermentation.

Tertiary strike flies arrive after 10 days. They are attracted to the remaining residuals: hair, skin, tendons, cartilage etc.

Green blow fly - *Lucilia sericata*



Distinguishing features	Brilliant green colour
Habitat	An urban fly often found in city rubbish tips.
Location	Australia wide.
Young	Eggs are deposited
Succession stage	Primary - within first 4 hours of death.

Black carrion fly - *Hydrotaea rostrata*



Distinguishing features	A dark bluish black native fly.
Habitat	Regional and urban.
Location	Australia-wide.
Activity	Summer, spring and autumn.
Young	This fly lays eggs on a corpse when it is already quite decomposed.
Succession stage	Tertiary – within 10 days after death. It is an important fly in cases that involve the discovery of a corpse several weeks after death.

Bluebodied blow fly - *Calliphora dubia*



Distinguishing features	Bluish hue.
Habitat	Regional and urban.
Location	South-western Australia only: Geraldton – Esperance.
Activity	Summer through to autumn.
Young	It does not lay eggs but batches of 30-80 fully developed larvae. Viviparous.
Succession stage	Primary – within 4 hours. This means that it is one of the first insects to arrive at a corpse.
Other	It is one of the major fly species associated with corpses in WA.

Hairy maggot blow fly - *Chrysomya rufifacies*



Distinguishing features	Dark bands on abdomen. Brilliant blue-green. Approx 10mm long adult. This is a robust fly.
Habitat	Regional and urban. Higher temperature required.
Location	Australia wide – native to Australia.
Activity	Mainly active during summer.
Young	Lays eggs.
Succession stage	Secondary – within 4 days. It is a secondary strike fly in temperate Australia but is a primary strike fly in tropical Australia.
Other	The hairy maggots predate maggots of other species.

Western goldenhaired blow fly - *Calliphora albifrontalis*



Distinguishing features	A large brown fly that grows up to 13mm long.
Habitat	It is restricted to area pockets and is sparse in number.
Location	Only found in the south west of Western Australia. Geraldton – Esperance.
Activity	Active during winter and spring.
Young	Lays eggs.
Succession stage	Primary – within 4 hours. One of the first flies to arrive.
Other	It is uncommon to find this fly on a copse.

Small hairy maggot blow fly - *Chrysomya varipes*



Distinguishing features	Blue-green colour. This is a small blowfly – about as big as a housefly.
Habitat	Regional and urban areas.
Location	Australia wide.
Young	Lays eggs
Succession stage	Secondary – within 4 days.
Other	The larvae of these flies are predacious. This means they will feed upon smooth maggots of flies that have arrived earlier if other food is not available.

All images courtesy of Dr Ian Dadour, Centre for Forensic Science, The University of Western Australia.