

APPENDIX 5.3

Gortyrhilly Wind Farm Bat Survey 2019/2020 Appendices

**Ecobat tool: Summary tables to enable analysis of the bat activity level
at each static location**

Table 1 – Survey Period 1: Summary of Ecobat Analysis Tool for Static Detectors Deployed at Gortyrhilly during Survey Period 1. G = Gortyrhilly and number = Turbine Location, so G1 = Turbine 1 at Gortyrhilly

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G1	<i>Myotis daubentonii</i>	0	1	0	0	11	0	Low
G1	<i>Myotis mystacinus</i>	0	0	0	0	12	0	Low
G1	<i>Myotis nattereri</i>	0	0	0	0	12	0	Low
G1	<i>Nyctalus leisleri</i>	3	4	0	0	5	70	Moderate to High
G1	<i>Pipistrellus nathusii</i>	0	1	0	0	11	0	Low
G1	<i>Pipistrellus pipistrellus</i>	3	3	0	0	6	35	Low to Moderate
G1	<i>Pipistrellus pygmaeus</i>	0	1	0	0	11	0	Low
G1	<i>Plecotus auritus</i>	0	1	0	0	11	0	Low
G1	<i>Rhinolophus hipposideros</i>	0	0	0	0	12	0	Low
G2	<i>Myotis daubentonii</i>	0	1	0	0	11	0	Low
G2	<i>Myotis mystacinus</i>	0	2	0	0	10	0	Low
G2	<i>Myotis nattereri</i>	0	1	0	0	11	0	Low
G2	<i>Nyctalus leisleri</i>	6	3	0	0	3	78	Moderate to High
G2	<i>Pipistrellus nathusii</i>	0	1	0	0	11	0	Low
G2	<i>Pipistrellus pipistrellus</i>	2	5	0	0	5	70	Moderate to High
G2	<i>Pipistrellus pygmaeus</i>	1	3	0	0	8	0	Low
G2	<i>Plecotus auritus</i>	0	2	0	0	10	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G2	<i>Rhinolophus hipposideros</i>	0	0	0	0	12	0	Low
G3	<i>Myotis daubentonii</i>	0	1	0	0	12	0	Low
G3	<i>Myotis mystacinus</i>	0	1	0	0	12	0	Low
G3	<i>Myotis nattereri</i>	0	0	0	0	13	0	Low
G3	<i>Nyctalus leisleri</i>	6	6	0	0	1	79	Moderate to High
G3	<i>Pipistrellus nathusii</i>	2	1	0	0	10	0	Low
G3	<i>Pipistrellus pipistrellus</i>	5	3	0	0	5	79	Moderate to High
G3	<i>Pipistrellus pygmaeus</i>	3	1	0	0	9	0	Low
G3	<i>Plecotus auritus</i>	0	0	0	0	13	0	Low
G3	<i>Rhinolophus hipposideros</i>	0	0	0	0	13	0	Low
G4	<i>Myotis daubentonii</i>	0	1	0	0	12	0	Low
G4	<i>Myotis mystacinus</i>	0	0	0	0	13	0	Low
G4	<i>Myotis nattereri</i>	0	0	0	0	13	0	Low
G4	<i>Nyctalus leisleri</i>	4	0	0	0	9	0	Low
G4	<i>Pipistrellus nathusii</i>	0	1	0	0	12	0	Low
G4	<i>Pipistrellus pipistrellus</i>	1	4	0	0	8	0	Low
G4	<i>Pipistrellus pygmaeus</i>	1	2	0	0	10	0	Low
G4	<i>Plecotus auritus</i>	0	0	0	0	13	0	Low
G4	<i>Rhinolophus hipposideros</i>	0	0	0	0	13	0	Low
G5	<i>Myotis daubentonii</i>	0	0	0	0	13	0	Low
G5	<i>Myotis mystacinus</i>	0	0	0	0	13	0	Low
G5	<i>Myotis nattereri</i>	0	0	0	0	13	0	Low
G5	<i>Nyctalus leisleri</i>	9	2	0	0	2	90	High

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G5	<i>Pipistrellus nathusii</i>	0	0	0	0	13	0	Low
G5	<i>Pipistrellus pipistrellus</i>	6	3	0	0	4	79	Moderate to High
G5	<i>Pipistrellus pygmaeus</i>	0	2	0	0	11	0	Low
G5	<i>Plecotus auritus</i>	0	0	0	0	13	0	Low
G5	<i>Rhinolophus hipposideros</i>	0	0	0	0	13	0	Low
G6	<i>Myotis daubentonii</i>	0	1	0	0	14	0	Low
G6	<i>Myotis mystacinus</i>	0	0	0	0	15	0	Low
G6	<i>Myotis nattereri</i>	0	0	0	0	15	0	Low
G6	<i>Nyctalus leisleri</i>	2	5	0	0	8	0	Low
G6	<i>Pipistrellus nathusii</i>	3	4	0	0	8	0	Low
G6	<i>Pipistrellus pipistrellus</i>	8	5	0	0	2	89	High
G6	<i>Pipistrellus pygmaeus</i>	1	3	0	0	11	0	Low
G6	<i>Plecotus auritus</i>	0	0	0	0	15	0	Low
G6	<i>Rhinolophus hipposideros</i>	0	4	0	0	11	0	Low
G7	<i>Myotis daubentonii</i>	8	2	0	0	5	85	High
G7	<i>Myotis mystacinus</i>	0	1	0	0	14	0	Low
G7	<i>Myotis nattereri</i>	0	1	0	0	14	0	Low
G7	<i>Nyctalus leisleri</i>	7	2	0	0	6	77	Moderate to High
G7	<i>Pipistrellus nathusii</i>	4	5	0	0	6	68	Moderate to High
G7	<i>Pipistrellus pipistrellus</i>	11	1	0	0	3	89	High
G7	<i>Pipistrellus pygmaeus</i>	5	4	0	0	6	68	Moderate to High
G7	<i>Plecotus auritus</i>	0	3	0	0	12	0	Low
G7	<i>Rhinolophus hipposideros</i>	0	0	0	0	15	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G8	<i>Myotis daubentonii</i>	0	1	0	0	14	0	Low
G8	<i>Myotis mystacinus</i>	0	0	0	0	15	0	Low
G8	<i>Myotis nattereri</i>	0	0	0	0	15	0	Low
G8	<i>Nyctalus leisleri</i>	6	3	0	0	6	68	Moderate to High
G8	<i>Pipistrellus nathusii</i>	9	1	0	0	5	89	High
G8	<i>Pipistrellus pipistrellus</i>	11	0	0	0	4	94	High
G8	<i>Pipistrellus pygmaeus</i>	6	3	0	0	6	77	Moderate to High
G8	<i>Plecotus auritus</i>	0	3	0	0	12	0	Low
G8	<i>Rhinolophus hipposideros</i>	0	0	0	0	15	0	Low
G9	<i>Myotis daubentonii</i>	0	1	0	0	14	0	Low
G9	<i>Myotis mystacinus</i>	0	0	0	0	15	0	Low
G9	<i>Myotis nattereri</i>	0	0	0	0	15	0	Low
G9	<i>Nyctalus leisleri</i>	4	4	0	0	7	68	Moderate to High
G9	<i>Pipistrellus nathusii</i>	0	3	0	0	12	0	Low
G9	<i>Pipistrellus pipistrellus</i>	5	5	0	0	5	68	Moderate to High
G9	<i>Pipistrellus pygmaeus</i>	0	1	0	0	14	0	Low
G9	<i>Plecotus auritus</i>	0	0	0	0	15	0	Low
G9	<i>Rhinolophus hipposideros</i>	0	0	0	0	15	0	Low
G10	<i>Myotis daubentonii</i>	0	1	0	0	14	0	Low
G10	<i>Myotis mystacinus</i>	0	0	0	0	15	0	Low
G10	<i>Myotis nattereri</i>	0	0	0	0	15	0	Low
G10	<i>Nyctalus leisleri</i>	5	3	0	0	7	68	Moderate to High
G10	<i>Pipistrellus nathusii</i>	0	3	0	0	12	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G10	<i>Pipistrellus pipistrellus</i>	5	5	0	0	5	68	Moderate to High
G10	<i>Pipistrellus pygmaeus</i>	0	1	0	0	14	0	Low
G10	<i>Plecotus auritus</i>	0	0	0	0	15	0	Low
G10	<i>Rhinolophus hipposideros</i>	0	0	0	0	15	0	Low
G11	<i>Myotis daubentonii</i>	1	0	0	0	12	0	Low
G11	<i>Myotis mystacinus</i>	0	0	0	0	13	0	Low
G11	<i>Myotis nattereri</i>	0	0	0	0	13	0	Low
G11	<i>Nyctalus leisleri</i>	1	0	0	0	12	0	Low
G11	<i>Pipistrellus nathusii</i>	1	0	0	0	12	0	Low
G11	<i>Pipistrellus pipistrellus</i>	1	1	0	0	11	0	Low
G11	<i>Pipistrellus pygmaeus</i>	0	1	0	0	12	0	Low
G11	<i>Plecotus auritus</i>	0	3	0	0	10	0	Low
G11	<i>Rhinolophus hipposideros</i>	0	0	0	0	13	0	Low
G12	<i>Myotis daubentonii</i>	0	4	0	0	12	0	Low
G12	<i>Myotis mystacinus</i>	0	2	0	0	14	0	Low
G12	<i>Myotis nattereri</i>	0	1	0	0	15	0	Low
G12	<i>Nyctalus leisleri</i>	6	6	0	0	4	77	Moderate to High
G12	<i>Pipistrellus nathusii</i>	4	4	0	0	8	34	Low to Moderate
G12	<i>Pipistrellus pipistrellus</i>	15	0	0	0	1	97	High
G12	<i>Pipistrellus pygmaeus</i>	6	5	0	0	5	68	Moderate to High
G12	<i>Plecotus auritus</i>	4	5	0	0	7	68	Moderate to High
G12	<i>Rhinolophus hipposideros</i>	0	4	0	0	12	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G13	<i>Myotis daubentonii</i>	1	3	0	0	12	0	Low
G13	<i>Myotis mystacinus</i>	1	2	0	0	13	0	Low
G13	<i>Myotis nattereri</i>	0	0	0	0	16	0	Low
G13	<i>Nyctalus leisleri</i>	10	2	0	0	4	84	High
G13	<i>Pipistrellus nathusii</i>	11	3	0	0	2	90	High
G13	<i>Pipistrellus pipistrellus</i>	13	0	0	0	3	97	High
G13	<i>Pipistrellus pygmaeus</i>	7	3	0	0	6	77	Moderate to High
G13	<i>Plecotus auritus</i>	0	1	0	0	15	0	Low
G13	<i>Rhinolophus hipposideros</i>	1	3	0	0	12	0	Low
G14	<i>Myotis daubentonii</i>	0	0	0	0	15	0	Low
G14	<i>Myotis mystacinus</i>	0	0	0	0	15	0	Low
G14	<i>Myotis nattereri</i>	0	0	0	0	15	0	Low
G14	<i>Nyctalus leisleri</i>	4	0	0	0	11	0	Low
G14	<i>Pipistrellus nathusii</i>	1	2	0	0	12	0	Low
G14	<i>Pipistrellus pipistrellus</i>	4	0	0	0	11	0	Low
G14	<i>Pipistrellus pygmaeus</i>	0	0	0	0	15	0	Low
G14	<i>Plecotus auritus</i>	0	1	0	0	14	0	Low
G14	<i>Rhinolophus hipposideros</i>	0	0	0	0	15	0	Low

Differences in activity between static detector locations split by species and location is presented in Figure 3-6 below. The centre line indicates the median activity level whereas the box represents the interquartile range (therefore the spread of the middle 50% of nights of activity). The plot for common pipistrelle shows that the activity level for both T12 and T13 was consistently high.

The centre line indicates the median activity level whereas the box represents the interquartile range (the spread of the middle 50% of nights of activity). The dots indicate outlier values. Note: *Myotis daubentonii* = Daubenton's bat, *Myotis mystacinus* = whiskered bat, *Myotis nattereri* = Natterer's bat, *Nyctalus leisleri* = Leisler's bat, *Pipistrellus nathusii* = Nathusius' bat, *Pipistrellus pipistrellus* = common pipistrelle, *Pipistrellus pygmaeus* = soprano pipistrelle, *Plecotus auritus* = brown long-eared bat and *Rhinolophus hipposideros* = lesser horseshoe bat. G = gortyrachilly and number = turbine location, so G1 = turbine 1 at Gortyrachilly.

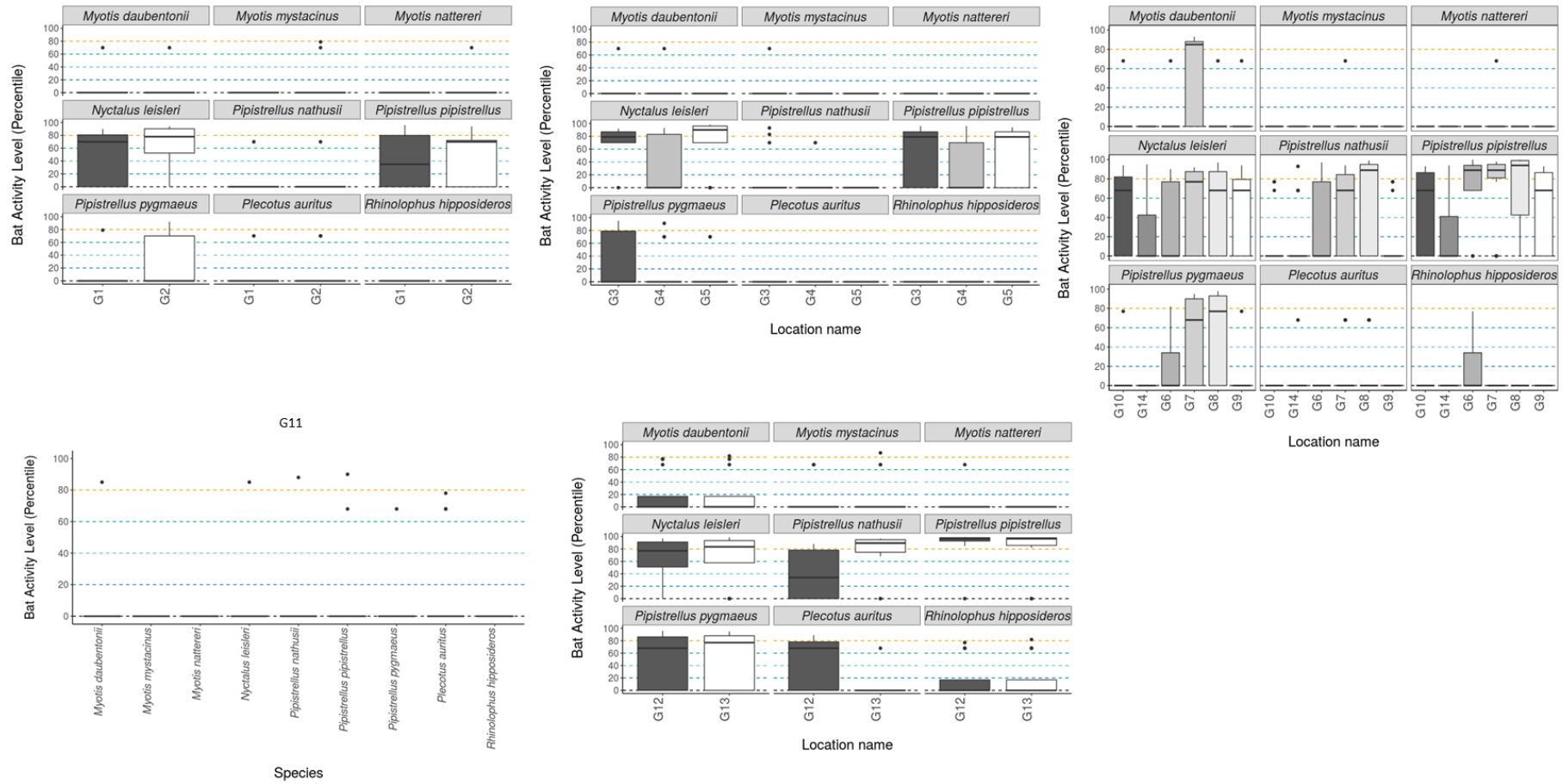


Figure 1: Differences in Activity between Static Detector Locations, split by Species and Locations during Survey Period 1 at Gortyrhillly

Table 2: Survey Period 2: Summary of Ecobat Analysis Tool for static detectors deployed at Gortyrhilly during survey period 2. G = Gortyrhilly and number = turbine location, so G1 = turbine 1 at Gortyrhilly.

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/High Activity	Nights of Moderate Activity	Nights of Low/Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G1	<i>Myotis daubentonii</i>	0	2	0	0	9	0	Low
G1	<i>Myotis mystacinus</i>	0	2	0	0	9	0	Low
G1	<i>Myotis nattereri</i>	0	2	0	0	9	0	Low
G1	<i>Nyctalus leisleri</i>	1	1	0	0	9	0	Low
G1	<i>Pipistrellus nathusii</i>	4	3	0	0	4	68	Moderate to High
G1	<i>Pipistrellus pipistrellus</i>	8	2	0	0	1	90	High
G1	<i>Pipistrellus pygmaeus</i>	1	1	0	0	9	0	Low
G1	<i>Plecotus auritus</i>	0	1	0	0	10	0	Low
G1	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G2	<i>Myotis daubentonii</i>	0	1	0	0	10	0	Low
G2	<i>Myotis mystacinus</i>	0	0	0	0	11	0	Low
G2	<i>Myotis nattereri</i>	0	0	0	0	11	0	Low
G2	<i>Nyctalus leisleri</i>	0	1	0	0	10	0	Low
G2	<i>Pipistrellus nathusii</i>	1	1	0	0	9	0	Low
G2	<i>Pipistrellus pipistrellus</i>	4	2	0	0	5	78	Moderate to High
G2	<i>Pipistrellus pygmaeus</i>	1	2	0	0	8	0	Low
G2	<i>Plecotus auritus</i>	0	0	0	0	11	0	Low
G2	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G3	<i>Myotis daubentonii</i>	0	3	0	0	8	0	Low
G3	<i>Myotis mystacinus</i>	0	0	0	0	11	0	Low
G3	<i>Myotis nattereri</i>	0	2	0	0	9	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G3	<i>Nyctalus leisleri</i>	2	5	0	0	4	68	Moderate to High
G3	<i>Pipistrellus nathusii</i>	0	4	0	0	7	0	Low
G3	<i>Pipistrellus pipistrellus</i>	2	3	0	0	6	0	Low
G3	<i>Pipistrellus pygmaeus</i>	0	3	0	0	8	0	Low
G3	<i>Plecotus auritus</i>	0	0	0	0	11	0	Low
G3	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G4	<i>Myotis daubentonii</i>	1	3	0	0	7	0	Low
G4	<i>Myotis mystacinus</i>	0	3	0	0	8	0	Low
G4	<i>Myotis nattereri</i>	0	3	0	0	8	0	Low
G4	<i>Nyctalus leisleri</i>	3	5	0	0	3	68	Moderate to High
G4	<i>Pipistrellus nathusii</i>	0	3	0	0	8	0	Low
G4	<i>Pipistrellus pipistrellus</i>	5	2	0	0	4	68	Moderate to High
G4	<i>Pipistrellus pygmaeus</i>	1	1	0	0	9	0	Low
G4	<i>Plecotus auritus</i>	0	2	0	0	9	0	Low
G4	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G5	<i>Myotis daubentonii</i>	0	4	0	0	7	0	Low
G5	<i>Myotis mystacinus</i>	0	1	0	0	10	0	Low
G5	<i>Myotis nattereri</i>	0	1	0	0	10	0	Low
G5	<i>Nyctalus leisleri</i>	1	2	0	0	8	0	Low
G5	<i>Pipistrellus nathusii</i>	1	4	0	0	6	0	Low
G5	<i>Pipistrellus pipistrellus</i>	10	0	0	0	1	96	High
G5	<i>Pipistrellus pygmaeus</i>	5	2	0	0	4	68	Moderate to High
G5	<i>Plecotus auritus</i>	0	1	0	0	10	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G5	<i>Rhinolophus hipposideros</i>	0	2	0	0	9	0	Low
G6	<i>Myotis daubentonii</i>	0	4	0	0	7	0	Low
G6	<i>Myotis mystacinus</i>	0	1	0	0	10	0	Low
G6	<i>Myotis nattereri</i>	0	0	0	0	11	0	Low
G6	<i>Nyctalus leisleri</i>	1	2	0	0	8	0	Low
G6	<i>Pipistrellus nathusii</i>	2	2	0	0	7	0	Low
G6	<i>Pipistrellus pipistrellus</i>	4	5	0	0	2	78	Moderate to High
G6	<i>Pipistrellus pygmaeus</i>	2	2	0	0	7	0	Low
G6	<i>Plecotus auritus</i>	0	0	0	0	11	0	Low
G6	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G7	<i>Myotis daubentonii</i>	10	0	0	0	1	96	High
G7	<i>Myotis mystacinus</i>	6	2	0	0	3	83	High
G7	<i>Myotis nattereri</i>	7	2	0	0	2	83	High
G7	<i>Nyctalus leisleri</i>	1	4	0	0	6	0	Low
G7	<i>Pipistrellus nathusii</i>	4	2	0	0	5	68	Moderate to High
G7	<i>Pipistrellus pipistrellus</i>	9	1	0	0	1	94	High
G7	<i>Pipistrellus pygmaeus</i>	8	1	0	0	2	91	High
G7	<i>Plecotus auritus</i>	3	4	0	0	4	68	Moderate to High
G7	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G8	<i>Myotis daubentonii</i>	0	3	0	0	8	0	Low
G8	<i>Myotis mystacinus</i>	0	1	0	0	10	0	Low
G8	<i>Myotis nattereri</i>	0	1	0	0	10	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G8	<i>Nyctalus leisleri</i>	3	2	0	0	6	0	Low
G8	<i>Pipistrellus nathusii</i>	3	1	0	0	7	0	Low
G8	<i>Pipistrellus pipistrellus</i>	5	1	0	0	5	68	Moderate to High
G8	<i>Pipistrellus pygmaeus</i>	4	0	0	0	7	0	Low
G8	<i>Plecotus auritus</i>	0	3	0	0	8	0	Low
G8	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G9	<i>Myotis daubentonii</i>	0	4	0	0	7	0	Low
G9	<i>Myotis mystacinus</i>	0	2	0	0	9	0	Low
G9	<i>Myotis nattereri</i>	0	0	0	0	11	0	Low
G9	<i>Nyctalus leisleri</i>	3	2	0	0	6	0	Low
G9	<i>Pipistrellus nathusii</i>	7	1	0	0	3	86	High
G9	<i>Pipistrellus pipistrellus</i>	9	0	0	0	2	95	High
G9	<i>Pipistrellus pygmaeus</i>	6	2	0	0	3	86	High
G9	<i>Plecotus auritus</i>	0	2	0	0	9	0	Low
G9	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G10	<i>Myotis daubentonii</i>	1	3	0	0	7	0	Low
G10	<i>Myotis mystacinus</i>	0	0	0	0	11	0	Low
G10	<i>Myotis nattereri</i>	0	2	0	0	9	0	Low
G10	<i>Nyctalus leisleri</i>	1	1	0	0	9	0	Low
G10	<i>Pipistrellus nathusii</i>	0	3	0	0	8	0	Low
G10	<i>Pipistrellus pipistrellus</i>	6	1	0	0	4	86	High
G10	<i>Pipistrellus pygmaeus</i>	1	4	0	0	6	0	Low
G10	<i>Plecotus auritus</i>	0	3	0	0	8	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G10	<i>Rhinolophus hipposideros</i>	0	1	0	0	10	0	Low
G11	<i>Myotis daubentonii</i>	0	4	0	0	7	0	Low
G11	<i>Myotis mystacinus</i>	0	2	0	0	9	0	Low
G11	<i>Myotis nattereri</i>	0	1	0	0	10	0	Low
G11	<i>Nyctalus leisleri</i>	2	2	0	0	7	0	Low
G11	<i>Pipistrellus nathusii</i>	3	3	0	0	5	68	Moderate to High
G11	<i>Pipistrellus pipistrellus</i>	9	1	0	0	1	88	High
G11	<i>Pipistrellus pygmaeus</i>	2	7	0	0	2	68	Moderate to High
G11	<i>Plecotus auritus</i>	0	6	0	0	5	68	Moderate to High
G11	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G12	<i>Myotis daubentonii</i>	0	1	0	0	10	0	Low
G12	<i>Myotis mystacinus</i>	0	4	0	0	7	0	Low
G12	<i>Myotis nattereri</i>	1	3	0	0	7	0	Low
G12	<i>Nyctalus leisleri</i>	2	0	0	0	9	0	Low
G12	<i>Pipistrellus nathusii</i>	2	4	0	0	5	68	Moderate to High
G12	<i>Pipistrellus pipistrellus</i>	11	0	0	0	0	97	High
G12	<i>Pipistrellus pygmaeus</i>	10	1	0	0	0	88	High
G12	<i>Plecotus auritus</i>	0	2	0	0	9	0	Low
G12	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G13	<i>Myotis daubentonii</i>	4	5	0	0	2	78	Moderate to High
G13	<i>Myotis mystacinus</i>	0	3	0	0	8	0	Low
G13	<i>Myotis nattereri</i>	0	6	0	0	5	68	Moderate to High

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G13	<i>Nyctalus leisleri</i>	3	4	0	0	4	68	Moderate to High
G13	<i>Pipistrellus nathusii</i>	6	2	0	0	3	83	High
G13	<i>Pipistrellus pipistrellus</i>	10	0	0	0	1	96	High
G13	<i>Pipistrellus pygmaeus</i>	8	2	0	0	1	90	High
G13	<i>Plecotus auritus</i>	3	5	0	0	3	68	Moderate to High
G13	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G14	<i>Myotis daubentonii</i>	0	1	0	0	10	0	Low
G14	<i>Myotis mystacinus</i>	0	0	0	0	11	0	Low
G14	<i>Myotis nattereri</i>	0	1	0	0	10	0	Low
G14	<i>Nyctalus leisleri</i>	3	2	0	0	6	0	Low
G14	<i>Pipistrellus nathusii</i>	3	1	0	0	7	0	Low
G14	<i>Pipistrellus pipistrellus</i>	5	2	0	0	4	78	Moderate to High
G14	<i>Pipistrellus pygmaeus</i>	1	1	0	0	9	0	Low
G14	<i>Plecotus auritus</i>	0	2	0	0	9	0	Low
G14	<i>Rhinolophus hipposideros</i>	0	0	0	0	11	0	Low
G15	<i>Myotis daubentonii</i>	0	2	0	0	18	0	Low
G15	<i>Myotis mystacinus</i>	0	1	0	0	19	0	Low
G15	<i>Myotis nattereri</i>	0	1	0	0	19	0	Low
G15	<i>Nyctalus leisleri</i>	6	2	0	0	12	0	Low
G15	<i>Pipistrellus nathusii</i>	1	3	0	0	16	0	Low
G15	<i>Pipistrellus pipistrellus</i>	10	2	0	0	8	75	Moderate to High
G15	<i>Pipistrellus pygmaeus</i>	1	3	0	0	16	0	Low
G15	<i>Plecotus auritus</i>	0	1	0	0	19	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G15	<i>Rhinolophus hipposideros</i>	0	0	0	0	20	0	Low
G16	<i>Myotis daubentonii</i>	1	6	0	0	13	0	Low
G16	<i>Myotis mystacinus</i>	0	2	0	0	18	0	Low
G16	<i>Myotis nattereri</i>	0	4	0	0	16	0	Low
G16	<i>Nyctalus leisleri</i>	2	6	0	0	12	0	Low
G16	<i>Pipistrellus nathusii</i>	3	1	0	0	16	0	Low
G16	<i>Pipistrellus pipistrellus</i>	13	3	0	0	4	86	High
G16	<i>Pipistrellus pygmaeus</i>	6	9	0	0	5	65	Moderate to High
G16	<i>Plecotus auritus</i>	0	4	0	0	16	0	Low
G16	<i>Rhinolophus hipposideros</i>	0	0	0	0	20	0	Low
G17	<i>Myotis daubentonii</i>	1	4	0	0	15	0	Low
G17	<i>Myotis mystacinus</i>	2	6	0	0	12	0	Low
G17	<i>Myotis nattereri</i>	0	4	0	0	16	0	Low
G17	<i>Nyctalus leisleri</i>	3	9	0	0	8	65	Moderate to High
G17	<i>Pipistrellus nathusii</i>	5	6	0	0	9	65	Moderate to High
G17	<i>Pipistrellus pipistrellus</i>	18	1	0	0	1	97	High
G17	<i>Pipistrellus pygmaeus</i>	9	6	0	0	5	76	Moderate to High
G17	<i>Plecotus auritus</i>	0	5	0	0	15	0	Low
G17	<i>Rhinolophus hipposideros</i>	0	1	0	0	19	0	Low
G18	<i>Myotis daubentonii</i>	0	3	0	0	17	0	Low
G18	<i>Myotis mystacinus</i>	0	0	0	0	20	0	Low
G18	<i>Myotis nattereri</i>	0	0	0	0	20	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G18	<i>Nyctalus leisleri</i>	0	0	0	0	20	0	Low
G18	<i>Pipistrellus nathusii</i>	0	2	0	0	18	0	Low
G18	<i>Pipistrellus pipistrellus</i>	3	3	0	0	14	0	Low
G18	<i>Pipistrellus pygmaeus</i>	0	0	0	0	20	0	Low
G18	<i>Plecotus auritus</i>	0	0	0	0	20	0	Low
G18	<i>Rhinolophus hipposideros</i>	0	0	0	0	20	0	Low

Differences in activity between static detector locations split by species and location is presented in the figure below. The centre line indicates the median activity level whereas the box represents the interquartile range (therefore the spread of the middle 50% of nights of activity). The plot for common pipistrelle shows that the activity level for both T5, T7, T9, T11, T12, T13 and T17 was consistently high. Similarly, the plot for soprano pipistrelle shows that the activity level for both T7, T12 and T13 was consistently high. Finally, the plot for Daubenton's bat shows that the activity level for T7 was consistently high.

The centre line indicates the median activity level whereas the box represents the interquartile range (the spread of the middle 50% of nights of activity). The dots indicate outlier values. Note: *Myotis daubentonii* = Daubenton's bat, *Myotis mystacinus* = whiskered bat, *Myotis nattereri* = Natterer's bat, *Nyctalus leisleri* = Leisler's bat, *Pipistrellus nathusii* = Nathusius' bat, *Pipistrellus pipistrellus* = common pipistrelle, *Pipistrellus pygmaeus* = soprano pipistrelle, *Plecotus auritus* = brown long-eared bat and *Rhinolophus hipposideros* = lesser horseshoe bat. G = gortyrähilly and number = turbine location, so G1 = turbine 1 at Gortyrähilly.

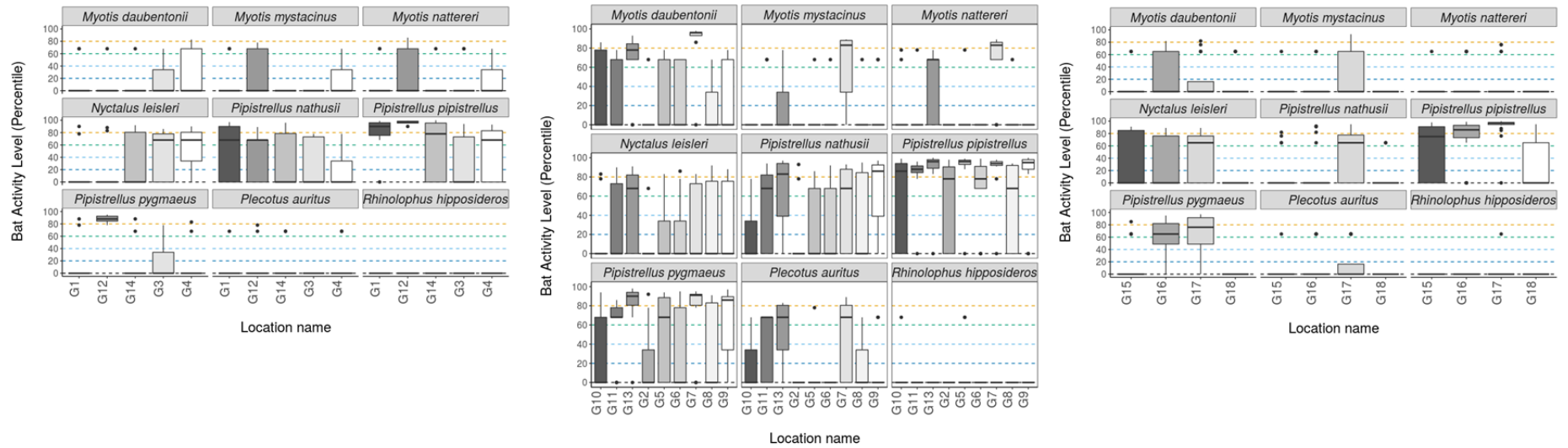


Figure 2: Differences in activity between Static Detector Locations, split by Species and Location during Survey Period 2 at Gortyrally

Table3: Survey Period 3 Summary of Ecobat Analysis Tool for static detectors deployed at Gortyrhilly during survey period 3. G = Gortyrhilly and number = turbine location, so G1 = turbine 1 at Gortyrhilly.

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G1	<i>Myotis daubentonii</i>	0	3	0	0	11	0	Low
G1	<i>Myotis mystacinus</i>	0	1	0	0	13	0	Low
G1	<i>Myotis nattereri</i>	0	1	0	0	13	0	Low
G1	<i>Nyctalus leisleri</i>	2	1	0	0	11	0	Low
G1	<i>Pipistrellus nathusii</i>	4	1	0	0	9	0	Low
G1	<i>Pipistrellus pipistrellus</i>	8	0	0	0	6	88	High
G1	<i>Pipistrellus pygmaeus</i>	3	5	0	0	6	63	Moderate to High
G1	<i>Plecotus auritus</i>	2	3	0	0	9	0	Low
G1	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G2	<i>Myotis daubentonii</i>	0	6	0	0	8	0	Low
G2	<i>Myotis mystacinus</i>	0	4	0	0	10	0	Low
G2	<i>Myotis nattereri</i>	0	6	0	0	8	0	Low
G2	<i>Nyctalus leisleri</i>	4	2	0	0	8	0	Low
G2	<i>Pipistrellus nathusii</i>	3	3	0	0	8	0	Low
G2	<i>Pipistrellus pipistrellus</i>	10	1	0	0	3	94	High
G2	<i>Pipistrellus pygmaeus</i>	8	2	0	0	4	90	High
G2	<i>Plecotus auritus</i>	0	2	0	0	12	0	Low
G2	<i>Rhinolophus hipposideros</i>	0	4	0	0	10	0	Low
G3	<i>Myotis daubentonii</i>	4	6	0	0	17	0	Low
G3	<i>Myotis mystacinus</i>	0	4	0	0	23	0	Low
G3	<i>Myotis nattereri</i>	0	6	0	0	21	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G3	<i>Nyctalus leisleri</i>	13	5	0	0	9	63	Moderate to High
G3	<i>Pipistrellus nathusii</i>	3	5	0	0	19	0	Low
G3	<i>Pipistrellus pipistrellus</i>	11	10	0	0	6	75	Moderate to High
G3	<i>Pipistrellus pygmaeus</i>	6	10	0	0	11	63	Moderate to High
G3	<i>Plecotus auritus</i>	1	12	0	0	14	0	Low
G3	<i>Rhinolophus hipposideros</i>	0	0	0	0	27	0	Low
G4	<i>Myotis daubentonii</i>	0	0	0	0	27	0	Low
G4	<i>Myotis mystacinus</i>	0	0	0	0	27	0	Low
G4	<i>Myotis nattereri</i>	0	0	0	0	27	0	Low
G4	<i>Nyctalus leisleri</i>	0	0	0	0	27	0	Low
G4	<i>Pipistrellus nathusii</i>	0	0	0	0	27	0	Low
G4	<i>Pipistrellus pipistrellus</i>	0	4	0	0	23	0	Low
G4	<i>Pipistrellus pygmaeus</i>	0	1	0	0	26	0	Low
G4	<i>Plecotus auritus</i>	0	0	0	0	27	0	Low
G4	<i>Rhinolophus hipposideros</i>	0	0	0	0	27	0	Low
G5	<i>Myotis daubentonii</i>	0	8	0	0	19	0	Low
G5	<i>Myotis mystacinus</i>	0	10	0	0	17	0	Low
G5	<i>Myotis nattereri</i>	0	1	0	0	26	0	Low
G5	<i>Nyctalus leisleri</i>	4	9	0	0	14	0	Low
G5	<i>Pipistrellus nathusii</i>	1	5	0	0	21	0	Low
G5	<i>Pipistrellus pipistrellus</i>	26	1	0	0	0	96	High
G5	<i>Pipistrellus pygmaeus</i>	19	6	0	0	2	85	High
G5	<i>Plecotus auritus</i>	1	9	0	0	17	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G5	<i>Rhinolophus hipposideros</i>	0	0	0	0	27	0	Low
G7	<i>Myotis daubentonii</i>	1	3	0	0	10	0	Low
G7	<i>Myotis mystacinus</i>	1	0	0	0	13	0	Low
G7	<i>Myotis nattereri</i>	0	2	0	0	12	0	Low
G7	<i>Nyctalus leisleri</i>	2	6	0	0	6	63	Moderate to High
G7	<i>Pipistrellus nathusii</i>	0	0	0	0	14	0	Low
G7	<i>Pipistrellus pipistrellus</i>	9	1	0	0	4	97	High
G7	<i>Pipistrellus pygmaeus</i>	9	1	0	0	4	89	High
G7	<i>Plecotus auritus</i>	1	4	0	0	9	0	Low
G7	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G9	<i>Myotis daubentonii</i>	1	6	0	0	7	32	Low to Moderate
G9	<i>Myotis mystacinus</i>	0	1	0	0	13	0	Low
G9	<i>Myotis nattereri</i>	1	4	0	0	9	0	Low
G9	<i>Nyctalus leisleri</i>	1	1	0	0	12	0	Low
G9	<i>Pipistrellus nathusii</i>	3	1	0	0	10	0	Low
G9	<i>Pipistrellus pipistrellus</i>	6	1	0	0	7	32	Low to Moderate
G9	<i>Pipistrellus pygmaeus</i>	9	0	0	0	5	85	High
G9	<i>Plecotus auritus</i>	1	3	0	0	10	0	Low
G9	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G10	<i>Myotis daubentonii</i>	0	2	0	0	12	0	Low
G10	<i>Myotis mystacinus</i>	0	1	0	0	13	0	Low
G10	<i>Myotis nattereri</i>	0	3	0	0	11	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G10	<i>Nyctalus leisleri</i>	0	2	0	0	12	0	Low
G10	<i>Pipistrellus nathusii</i>	1	1	0	0	12	0	Low
G10	<i>Pipistrellus pipistrellus</i>	6	3	0	0	5	70	Moderate to High
G10	<i>Pipistrellus pygmaeus</i>	4	3	0	0	7	32	Low to Moderate
G10	<i>Plecotus auritus</i>	1	3	0	0	10	0	Low
G10	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G11	<i>Myotis daubentonii</i>	0	5	0	0	9	0	Low
G11	<i>Myotis mystacinus</i>	0	0	0	0	14	0	Low
G11	<i>Myotis nattereri</i>	0	1	0	0	13	0	Low
G11	<i>Nyctalus leisleri</i>	5	3	0	0	6	63	Moderate to High
G11	<i>Pipistrellus nathusii</i>	4	3	0	0	7	32	Low to Moderate
G11	<i>Pipistrellus pipistrellus</i>	9	2	0	0	3	93	High
G11	<i>Pipistrellus pygmaeus</i>	9	1	0	0	4	87	High
G11	<i>Plecotus auritus</i>	0	4	0	0	10	0	Low
G11	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G12	<i>Myotis daubentonii</i>	0	5	0	0	9	0	Low
G12	<i>Myotis mystacinus</i>	0	1	0	0	13	0	Low
G12	<i>Myotis nattereri</i>	0	6	0	0	8	0	Low
G12	<i>Nyctalus leisleri</i>	0	4	0	0	10	0	Low
G12	<i>Pipistrellus nathusii</i>	0	2	0	0	12	0	Low
G12	<i>Pipistrellus pipistrellus</i>	8	3	0	0	3	86	High
G12	<i>Pipistrellus pygmaeus</i>	8	2	0	0	4	82	High
G12	<i>Plecotus auritus</i>	1	4	0	0	9	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G12	<i>Rhinolophus hipposideros</i>	0	1	0	0	13	0	Low
G13	<i>Myotis daubentonii</i>	4	2	0	0	8	0	Low
G13	<i>Myotis mystacinus</i>	1	3	0	0	10	0	Low
G13	<i>Myotis nattereri</i>	0	2	0	0	12	0	Low
G13	<i>Nyctalus leisleri</i>	3	2	0	0	9	0	Low
G13	<i>Pipistrellus nathusii</i>	5	1	0	0	8	0	Low
G13	<i>Pipistrellus pipistrellus</i>	9	0	0	0	5	90	High
G13	<i>Pipistrellus pygmaeus</i>	3	2	0	0	9	0	Low
G13	<i>Plecotus auritus</i>	0	0	0	0	14	0	Low
G13	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G14	<i>Myotis daubentonii</i>	3	4	0	0	7	32	Low to Moderate
G14	<i>Myotis mystacinus</i>	0	2	0	0	12	0	Low
G14	<i>Myotis nattereri</i>	0	2	0	0	12	0	Low
G14	<i>Nyctalus leisleri</i>	2	4	0	0	8	0	Low
G14	<i>Pipistrellus nathusii</i>	5	1	0	0	8	0	Low
G14	<i>Pipistrellus pipistrellus</i>	8	3	0	0	3	84	High
G14	<i>Pipistrellus pygmaeus</i>	5	3	0	0	6	63	Moderate to High
G14	<i>Plecotus auritus</i>	1	2	0	0	11	0	Low
G14	<i>Rhinolophus hipposideros</i>	0	0	0	0	14	0	Low
G15	<i>Myotis daubentonii</i>	0	0	0	0	14	0	Low
G15	<i>Myotis mystacinus</i>	0	0	0	0	14	0	Low
G15	<i>Myotis nattereri</i>	0	0	0	0	14	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G15	<i>Nyctalus leisleri</i>	0	0	0	0	14	0	Low
G15	<i>Pipistrellus nathusii</i>	0	1	0	0	13	0	Low
G15	<i>Pipistrellus pipistrellus</i>	3	5	0	0	6	63	Moderate to High
G15	<i>Pipistrellus pygmaeus</i>	4	1	0	0	9	0	Low
G15	<i>Plecotus auritus</i>	0	3	0	0	11	0	Low
G15	<i>Rhinolophus hipposideros</i>	0	4	0	0	10	0	Low
G17	<i>Myotis daubentonii</i>	4	4	0	0	6	63	Moderate to High
G17	<i>Myotis mystacinus</i>	3	5	0	0	6	63	Moderate to High
G17	<i>Myotis nattereri</i>	4	6	0	0	4	63	Moderate to High
G17	<i>Nyctalus leisleri</i>	2	4	0	0	8	0	Low
G17	<i>Pipistrellus nathusii</i>	5	4	0	0	5	63	Moderate to High
G17	<i>Pipistrellus pipistrellus</i>	12	2	0	0	0	97	High
G17	<i>Pipistrellus pygmaeus</i>	10	3	0	0	1	97	High
G17	<i>Plecotus auritus</i>	4	3	0	0	7	32	Low to Moderate
G17	<i>Rhinolophus hipposideros</i>	3	3	0	0	8	0	Low
G18	<i>Myotis daubentonii</i>	0	5	0	0	9	0	Low
G18	<i>Myotis mystacinus</i>	0	2	0	0	12	0	Low
G18	<i>Myotis nattereri</i>	0	0	0	0	14	0	Low
G18	<i>Nyctalus leisleri</i>	0	0	0	0	14	0	Low
G18	<i>Pipistrellus nathusii</i>	0	2	0	0	12	0	Low
G18	<i>Pipistrellus pipistrellus</i>	5	1	0	0	8	0	Low
G18	<i>Pipistrellus pygmaeus</i>	4	4	0	0	6	63	Moderate to High
G18	<i>Plecotus auritus</i>	2	3	0	0	9	0	Low

Location	Species/Species Group	Nights of High Activity	Nights of Moderate/ High Activity	Nights of Moderate Activity	Nights of Low/ Moderate Activity	Nights of Low Activity	Median Percentile	Bat Activity
G18	<i>Rhinolophus hipposideros</i>	0	1	0	0	13	0	Low
G19	<i>Myotis daubentonii</i>	4	7	0	0	20	0	Low
G19	<i>Myotis mystacinus</i>	5	9	0	0	17	0	Low
G19	<i>Myotis nattereri</i>	3	8	0	0	20	0	Low
G19	<i>Nyctalus leisleri</i>	5	9	0	0	17	0	Low
G19	<i>Pipistrellus nathusii</i>	2	9	0	0	20	0	Low
G19	<i>Pipistrellus pipistrellus</i>	21	0	0	0	10	94	High
G19	<i>Pipistrellus pygmaeus</i>	10	6	0	0	15	64	Moderate to High
G19	<i>Plecotus auritus</i>	5	5	0	0	21	0	Low
G19	<i>Rhinolophus hipposideros</i>	0	2	0	0	29	0	Low

Differences in activity between static detector locations split by species and location is presented in the figure below. The centre line indicates the median activity level whereas the box represents the interquartile range (therefore the spread of the middle 50% of nights of activity). The plot for common pipistrelle shows that the activity level for T17 was consistently high.

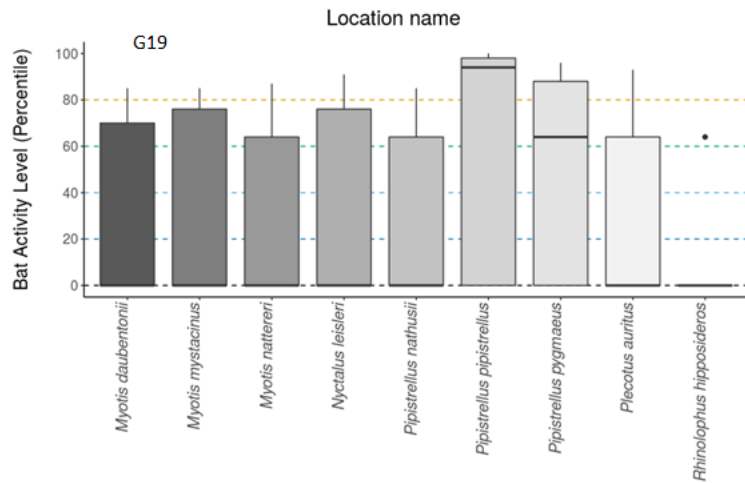
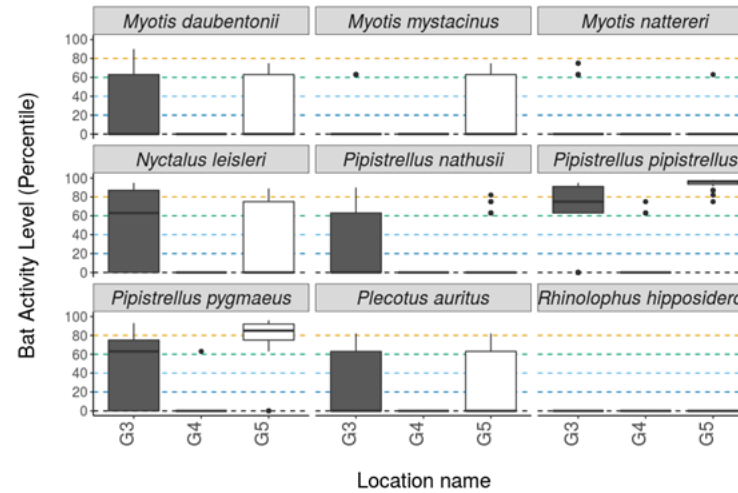
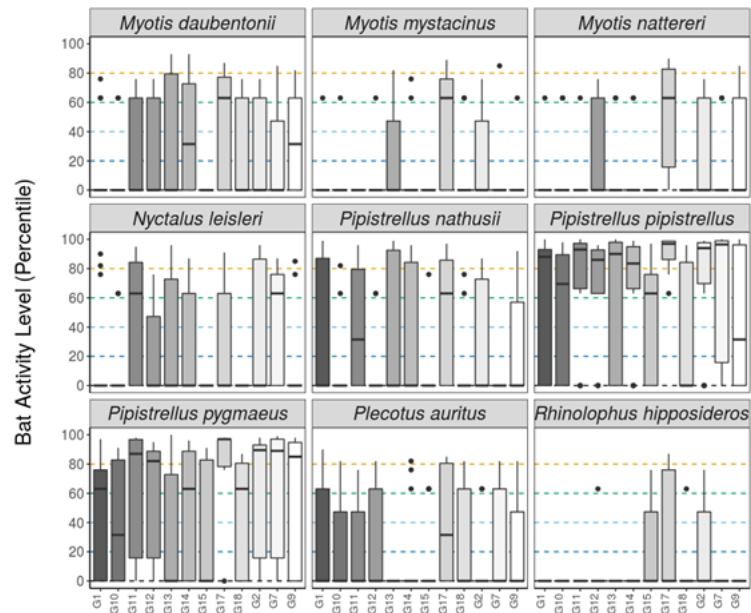


Figure3: Differences in activity between static detector locations, split by species and location during survey period 3 at Gortyrally.

The centre line indicates the median activity level whereas the box represents the interquartile range (the spread of the middle 50% of nights of activity). The dots indicate outlier values. Note: *Myotis daubentonii* = Daubenton's bat, *Myotis mystacinus* = whiskered bat, *Myotis nattereri* = Natterer's bat, *Nyctalus leisleri* = Leisler's bat, *Pipistrellus nathusii* = Nathusius' bat, *Pipistrellus pipistrellus* = common pipistrelle, *Pipistrellus pygmaeus* = soprano pipistrelle, *Plecotus auritus* = brown long-eared bat and *Rhinolophus hipposideros* = lesser horseshoe bat. G = gortyrhilly and number = turbine location, so G1 = turbine 1 at Gortyrhilly.

If, for unforeseen reasons, works to a structure identified as bat roost become unavoidable it will be necessary to apply for a derogation licence from NPWS wildlife licencing section before works are allowed. The destruction of known roosts cannot proceed without a derogation licence (Section 23 & 34 licence prescribed under the Wildlife Act 1976 (as amended); and Section 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) being in place and specific mitigation measures being approved in advance with NPWS.

A 50 m buffer distance from turbine blade tip to any key habitat feature (e.g. woodland, wetlands) should be applied. This is especially relevant for turbines located within or near to forestry towards the east of the Gortyrhilly site and for much of the Inchamore site. This should be achieved either by turbine micro-siting or trimming of key habitat features both during construction and operation of the proposed wind farm.