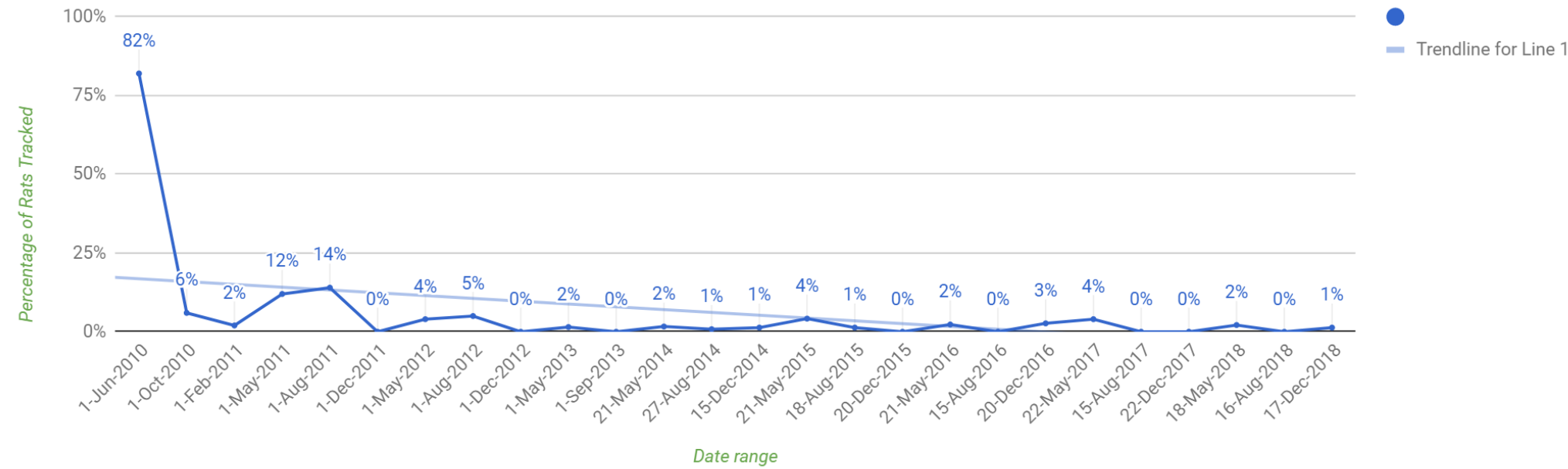
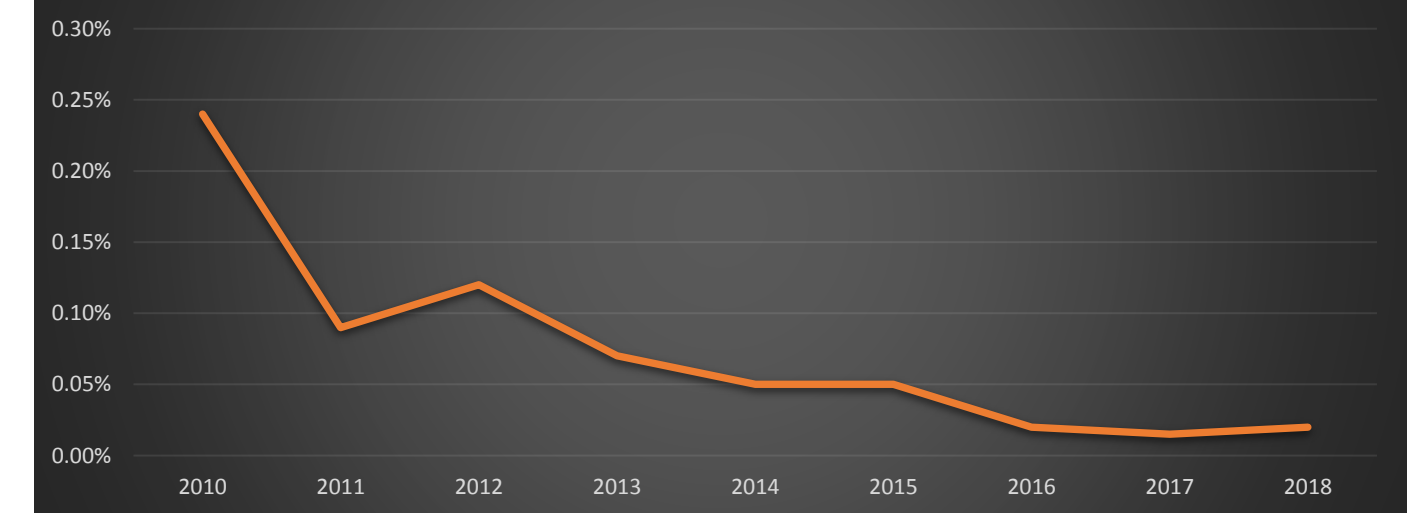


Summary of predator control and species outcome monitoring conducted by Bream Head Conservation Trust at Bream Head Scenic Reserve Since 2010.

BHCT Rat Tracking Index overtime



BHCT Annual average Possum catch rate %



Data	2010	2011	2012	2013	2014	2015	2016	2017	2018	Comment
Annual Average Rat RTI	82% pre-treatment 6% post treatment	7% (area 1 & busby)	2.6% (areas 1-2)	1.35% (areas 1-3)	1.43% (areas 1-3)	1.83% Entire reserve	1.66% Entire reserve	1.33% Entire reserve	1.33% Entire Reserve	<ul style="list-style-type: none"> 150 tracking tunnels over 805ha Pindone used predominantly - 125gm/bait station Pindone/diphacinone switch out to half reserve stations 2016 Entire reserve 1080 ground delivery to bait stations – winter 2017 Busby had two rats tracked in Dec 2018 at Home Bay beach. New toxin line to go in here to cover the new planting habitat.
Annual Average mouse RTI	n/a	n/a	n/a	n/a	n/a	13.16%	22.6%	28.88%	32.66% Entire reserve	150 tracking tunnels over 805ha Pindone used predominantly - 125gm/bait station Pindone/diphacinone switch out to half reserve stations 2016 Entire reserve 1080 ground delivery to bait stations – winter 2017
TCR possum	0.24%	0.09%	0.12%	0.07%	0.05%	0.05%	0.02%	0.015%	0.02%	6,380 trap nights to catch one possum in 2017!!
TCR mouse	n/a	n/a	n/a	n/a	n/a	0.17%	0.10%	0.11%	0.32%	59 snap traps 2010 – 2017. 182 snap traps from 2018. 2018 figure higher than previous years due to dramatic increase in traps set in 2018.
BMI	n/a	n/a	4%	n/a	n/a	n/a	n/a	n/a	n/a	Standard trigger for possum control is 20% BMI (or 5% RTI).
Kiwi call counts	3.5 calls/hr	4.5 calls/hr	6.5 calls per/hr	8.2 calls per/hr	10 calls/hr	10 calls/hr	10 calls/hr	10 calls/hr	n/a	Adam to conduct kiwi call counts at Peach Cove site(s) from 2019 listening season
grey faced petrel (oi)	n/a	n/a	n/a	n/a	GFP ground breeding calls captured by acoustic devices	3 eggs laid but all predated by rats.	10 chicks hatch but all are predated by stoat(s)	10 monitored chicks survived fledging!!	All five monitored chicks in study area successfully hatched. Two 100% breeding seasons. Cooks petrel and fluttering shearwater calls heard during prospecting season in 2018 via acoustic recorders.	2017/18 Data checked with DOC senior biodiversity ranger and Chris Gaskin (private seabird expert). Cooks petrel and fluttering shearwater calls confirmed by Cathy Mitchell. BHCT to lodge application in 2019 for funds to survey for these species within BHSR.
NI robins (toutouwai)	n/a	n/a	n/a	n/a	n/a	n/a	40 NI Robins translocated to BH. 9 monitored pairs produce 19 successful fledglings.	Many new fledglings seen in new areas throughout the reserve. 9 monitored pairs still alive and breeding.	Robins not surveyed in 2018. Many observations of new fledglings in late spring in many new areas of the reserve.	Translocation post release breeding success!
whiteheads/popok atea	n/a	n/a	n/a	n/a	n/a	n/a	n/a	100 Whiteheads translocated to BH. 5 Nests successful with fledglings. Other adults found but difficult to locate nests.	57 Whiteheads seen/heard in the 2018 Spring Whitehead survey!!	BHCT will monitor whiteheads again in 2018/19 breeding season to determine success.
Placostylus	2010 37 ad 6 juv	2011 29 ad 5 juv	n/a	n/a	2014 6 ad 3 juv	n/a	n/a	40 search plots. <ul style="list-style-type: none"> 8 live Snails. 99 dead snail shells. 3 Juvenile 5 Adults Density of snails/m2 = 0.005	40 search plots: <ul style="list-style-type: none"> 53 live snails!! 33 live Juv 19 live adult 50 dead Juv 24 dead adult 	<ul style="list-style-type: none"> 2008 30 ad 33 juv Northtec students (led by Dai Morgan) will conduct annual surveys of the BH Placostylus population. Adam keen to intensify bait station grid at Placo site to 25x25m in 2018, as this is current best practice for Mice control. Also switch out every 6 months between Diphacinone and Pindone. 2018 Survey conducted by Northtec (led by DR Dai Morgan) in new search site East of original site.

Lizards	n/a		Annual Total = 7 Lizards 1 ornate skink. 5 x unidentified skinks. 1x Auckland green gecko.	Annual Total = 7 Lizards 3x Auckland green gecko. 1x copper skink. 1x ornate skink. 2 x pacific gecko	Annual Total = 7 Lizards 2x copper skink. 4 x Bream Head skink. 1x moco skink.	Annual Total = 15 Lizards.. 11x Bream Head skink. 2x pacific gecko. 2x ornate skink.	Annual Total = 17 Lizards. 10x ornate skink. 6x Bream Head skink. 1x unknown.	Annual Total = 16 lizards. 3x Ornate, 2x moco, 1x copper, 9x BH skink, 1x rainbow (plague) skink.	Survey not run in 2018 – survey to be conducted every two years from 2017 onwards.	Survey not implemented in 2018. BH lizard survey to be implemented biennially (supported by B Barr). Next survey in Jan/Feb 2019
Five minute bird counts (5mbc).	DOC historic records prior to this date need analysing	n/a	n/a	n/a	n/a	n/a	n/a	<ul style="list-style-type: none"> • 53 count stations. • Highest # of species per count = 40. • Total # of individual species counted = 3475. • Australasian Harrier 2/0.06%. • Pied Shag 17/0.49%. • Kereru/Kukupu 62/1.78%. • Tui 227/6.53%. • Bellbird 34/0.98%. • Grey Warbler 334/9.61%. • Whitehead 12/0.35%. • Fantail 228/6.56%. • NI Tomtit 93/2.68%. • NI robin 46/1.32%. • Silver eye 560/16.12% 	<ul style="list-style-type: none"> • 54 count stations. • 48 Known bird spp. at BHSR. • Highest # of species per count = 37 (Jan/March). Lowest = 23 (April/Sept). • Total # of individual species counted = 4067. • Australasian Harrier 4/0.035%. • Pied Shag 31/0.45%. • Kereru/Kukupu 92/2%. • Kaka 85/1.38% • Tui 380/8.0%. • Bellbird 59/1.25%. • Grey Warbler 492/7.75%. • Whitehead 28/0.31%. • Fantail 453/7.58%. • NI Tomtit 146/2.18%. • NI robin 28/0.42%. • Silver eye 837/21.63% 	<p>14.55% increase in individuals counted in 2018 compared to 2017.</p> <p>All species relative abundance increased except NI robin in 2018</p> <p>Key indicator species are listed, see ebird results online for other BHCT 5mbc species data.</p> <p>Each individual key indicator species data is:</p> <p># individuals counted/ relative abundance % amongst other species counted.</p>
Weta RTI (annual average)	8%	20.25%	16%	20%	13.33%	30%	20.33%	17.25%.	30.44%	Weta are an Invertebrate indicator species