

expected \$\$ coming back assuming start in may								
3 months per round								
\$6 per pound	70 birds per pen							
990 lbs								
	\$5,940							
Variable costs:	3500							
profit:	\$2,440							
Egg machine is made in the downtime after 4 pp are made								
Each carton of 12 sells for \$5								

item	price		total price	link	m	n'
Microscope	390	1	390	https://www.amazon.com/dp/B08DHDJ29B/ref=sspa_srl_detail_2?pf_rd_a=ZWSjontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
720 extra slides	65	1	65	https://www.amazon.com/dp/B07651J790/ref=twister_B01LUWJCX77_encoding=UTF8&psc=1		
upgraded camera for microscope (18mp)	410	1	410	https://www.amazon.com/dp/B07D4DF92/ref=sspa_srl_detail_1?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwVeg1OTJlRmJlPmFEEWjTlEwY1dMlTYzYWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
16" macbook pro	2500	2	5000	apple.com/shop/buy-mac/macbook-pro/16-inch		
Samsung S6	294	1	294	https://www.amazon.com/Samsung-Galaxy-Life-Tablet-Oxford/dp/B0882Z2FYYP/ref=as_li_s7?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
ipad w/cellular	450	1	450	https://www.amazon.com/Apple-Generation-10-2-inch-Wi-Fi-Cellular/dp/B08LQYTF1D/ref=as_li_s1_17?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
Trail cam	65	8	520	https://www.amazon.com/Hunting-12PC-C3-B0Wide-Angle-Waterproof-Wildlife-Monitoring/dp/B08DJ5WVQV/ref=sr_bs_3413551_1143.5301664-49183007ed_ref=088DJ5WVQV&psc=1		
12x50 binoculars	70	2	140	https://www.amazon.com/dp/B098D29RLO/ref=sr_ssps_d0_detail_3?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
24 pack AA rechargeable batteries	30	2	60	https://www.amazon.com/dp/B07NAG365W/ref=twister_B07NAG365W_encoding=UTF8&h=1		
gopro hero 10 w/kit	539	1	539	https://www.amazon.com/GoPro-HERO10-Black-Waterproof-Stabilization/dp/B0CQD9JWCT/ref=as_li_s1_10?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
go pro hero 9	350	1	350	https://www.amazon.com/GoPro-HERO9-Black-Waterproof-Stabilization/dp/B09DULW458/ref=as_li_s1_3?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
Nikon D500	1596	1	1596	https://www.amazon.com/Nikon-D500-DX-Format-Digital-Body/dp/B01A7Q0J3Y/ref=sspa_l_ss_0?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
nikon 200-500mm f5.6E ED Zoom Lens Bundle	1449	1	1449			
Nikon 70-200mm f2.8G ED VR II AF-S	2000	1	2000			
nikon Z8 II w/ 24-70mm frame	2500	1	2500	https://www.nikonusa.com/en/nikon-products/product/mirrorless-cameras/z-8-ii.html		
Temp and humidity monitor Govee 4 pack	40	4	160	https://www.amazon.com/Govee-Temperature-Hygrometer-Thermometer-Greenhouse/dp/B092FEF82B/ref=as_li_s2_ssps_d0_detail_3?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
Govee thermometer 2 pack for tougher jobs	24	2	48			
5 in 1 wifi weather station with solar	140	2	280	https://www.amazon.com/Logia-Monitoring-Temperature-Humidity-Direction/dp/B0855R9R8H/ref=as_li_s2_ssps_d0_detail_3?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
apple iphone 11 pro	523	2	1046	https://www.apple.com/iphone-11-pro/other-pop-defender-series/77.62577.html#pref=1&device_name=&pref=1&Phone11+Pro&start=1		
Heavy duty case	70	2	140			
DJI Mavic 3 fly more kit	3000	1	3000	https://store.dji.com/product/mavic-3-fly-more-kit		
Arduino IOT	114	3	342	https://store-usa.arduino.cc/collections/kits/products/arduino-gpio-301-kit		
Arduino Engineering kit	289	3	867	https://store-usa.arduino.cc/products/arduino-engineering-kit-rev2?pf_rd_a=ZW5jontweGvUXVhbGimaWVYPUeANVNM0pFTVHTfE2JmWjY3J5cHRZFEPUeMDQOOTQyMnQWVfVSVjTzXScZbmiYpXNwXZBRZFkPUEwOTARNdYdMVAyVDMFYdM0jU5Bz3aWRoZXR0YWI1P3NwXZBRGf8DmYWNQeW9wPW9sWNLjMjY3QmZG9OZ3RMBz2DQgjsj10cmYt&h=1		
total	13505		21646			

item	price	quantity	end price	comments
powerflex polybraid mixed metal (8) 1320 ft	68	9	612	https://powerflexfence.com/collections/powerflex-polybraid/products/powerflex-polybraid-mixed-metal-1320
3 geared polywire reel	68	9	612	http://www.lensgate.com/temporary_fencing_ranges.php
Obrien Step in post (every 30th) (16 per 200m) box of 50	236	4	944	https://powerflexfence.com/products/obrien-step-in-post-blue-50p
Gallagher pigtail (corner)	4.29	20	85.8	https://store.am.gallagher.com/amv/en_US/animal-management/electric-fencing/portable-fencing/posts---pigtail-end-tread-ins/standard-pigtail/v/G64219
Gallagher ringtop 10 ct (better corner)	80	3	240	https://www.gallagher.eu/en_export/multi-wire-ring-top-pool-white-1-10m-10
wire guide	6	1	6	
Fault finder	130	1	130	https://www.amazon.com/Gallagher-G50900-SmartFix-Fence-Tester/dp/B001P6ZSOY
1.75" T post (perimeter fencing) spread every 50' (80 per 400)	70	400	4000	https://lmetestle.com (cheaper option is to go with a 1.25 fiber glass post)
12.5 gauge galvanized high tensile wire 400R	120	5	600	https://www.tractorsupply.com/bs-product/high-tensile-smooth-wire-200-000-pai-4-000-ft
ez daisy wire tightener 50 pack	200	1	200	https://kencove.com/fence/EZ-Daisy+Online+Tightener+with+Clip_detail_SSDN.php
Spinning Jenny	54	3	162	https://www.tractorsupply.com/bs/product/american-farmworks-spinning-jenny-electric-fence-wire-de-reeler-1213273
Cattle movers (3-4 times per day)			0	
Batt-latch gate	450	3	1350	https://www.americangrazinglands.com/products/batt-latch-gate-release-tilmer
polywire lifter	380	2	760	https://www.americangrazinglands.com/products/solar-power-automatic-polywire-liftgate
Tumbleweed	650	2	1300	https://www.gallagher.eu/en_export/fence-guides/tumbleweed-pack-of-5
speedrite 1800 energizer	970	1	970	https://powerflexfence.com recommended to go for a Statik M63R but none in stock
110 gallon tank	130	1	130	
25 Milking machine	480	1	480	https://www.walmart.com/ip/VEVOR-Electric-Milking-Machine-25L-Milker-5-8-Cows-per-Hour-0.56KW-1680-RPM-Equipment-25L-304-Stainless-Steel-Bucket-Single-Cow-Milker-Goal580139219
6l Liquid nitrogen tank	194	1	194	https://www.amazon.com/Bovvoina-Contenedor-comenedor-criog%C3%A9nico-transporte/dp/B0993KDW9F/ref=sr_1_2_sspa?_mk_es_US%3C%85MPLC%85%3C%BD%3C%85%3C%918crid=12SKKGRBM94YL&keywords=liquid+nitrogen+6+l&qid=1647658032&srrefix=liquid+nitrogen+6%2Caps%2C181&r=8-2_spons&psc=1&pf_rd_p=ZW5icmludGVVXUYibGimaWVPUExVUS
Total		1	12775.8	
youtube.com/watch?v=Z7mS8t8PHQ				
note: adding Gallagher's EID system would give us significantly updated data	15,000			https://fencefast.ca/collections/eid-tag-readers

item	quantity	end price	comments
4 pack 16 oz spray bottles	11		https://www.amazon.com/dp/B01K23B06Q/ref=sxbs_sxwds_stopw_17of_rd_m=ATVPDKIKX0DER&pf_rd_p=3534659762&pf_rd_wg=MhG&pf_rd_r=NDWY8KZACF5AHC6QME&pf_rd_s=desktop-sx-bottom-st&pf_rd_i=301&pf_rd_i=B01K23B06Q&pf_rd_w=2CH2&pf_rd_i=spray+bottle&pf_rd_r=7934a1ea-c071-4b07-8e51-c7a28784-c68&ie=UTF8&qid=1523656273&sr=1
11 hand held pump sprayer	10		https://www.amazon.com/PUMP-SPRAYER-WATER-SPRAYERS-Pressure/dp/B011X9F81B/ref=hp_1_197a1eam-garden&ie=UTF8&out=1523655527&sr=1-19&keywords=spray+bottle
2 gallon backpack sprayer	32		https://www.amazon.com/dp/B01W4C812/ref=sopa_dk_detail_0?pf_rd_p=1&pf_rd_i=B01W4C812&pf_rd_w=12hrC&pf_rd_r=84RYAY8H12C28RCCN&pf_rd_w=511Bd
aerocart wheelbarrow/trolley	128		https://www.amazon.com/aerocart-MultiFunction-2-Wheeled-Dolly-Wheelbarrow/dp/B00KCI75SM/ref=hp_1_87e4JTF8&qid=1523662298&sr=8-8&keywords=wheelbarrow&hp_1
1 greenhouse 25X100	11,000		
Two wheeled tractor and accessories	8500		
2 hoophouses	4000		
Irrigation system	3,000		
furnace	1150		
flame-weeder	600		
indoor seeding equipment	600		
hoes and wheel hoe	600		
broadfork	200		
seeders	300		
rakes, shovels, spades wheelbarrow, etc	300		
floating row cover, anti-insect netting and hoop	600		
sprayer	100		
harvest baskets, scales and other equipment	300		
electric fencing	500		
total	31931		

Note: may be possible to purchase used items and have them sent to colombia, having a significantly lower cost.

50 hp tractor and attachments								
60GST - 4WD GST TRACTOR W/FOLDABLE RC	35000	with attachments	69,444	https://apps.kubotausa.com/configurator/BuildMyKubota.aspx?pgld=1&bmlid=961&slid=125				
Honda Fourtrax Rancher 420cc ATV	7500			https://powersports.honda.com/atv/recutility/fourtrax-rancher/build/summary?retrieve=4MD9P				
Polaris SxS Ranger with ranch combo	23000			https://ranger.polaris.com/en-us/build-load/?id=dee68a0b-c38a-4534-97a9-dbf67f569daf&CatalogContentId=626846_CatalogContent&showpurposeprompt=false				
"farm truck"	5000	craigslist						
Total	70500	USED TRACTOR	35500					
More attachments:								
85 cubic yard ABI manure spreader	6500			https://www.abiattachments.com/product/abi-classic-manure-spreader-85-ground-drive/		Tractor attachments		
Power harrow	3500			https://tractortoolsdirect.com/ibex-tx40-power-harrow-with-mesh-roller-and-leveling-blade				
Weeder Tines	1500			https://www.machinerydealer.co.uk/product/weeder-tines-various-sizes/			1 FRONT - 8.3-16 R1 OTR Traction Master	
Interrow cultivator with S tine	1000			https://www.alibaba.com Note alibaba for now to speed up process			REAR - 14.9-24 R1 Titan Hi Power Lug TLinc.	
Rhino Gear Ramps	54			https://www.amazon.com/RhinoGear-11912-RhinoRamps-Vehicle-Ramps/dp/B0117EESNC/ref=sr_1_23?keywords=RhinoGear&pf_rd_p=80663488-428b-4e91-8901-7c4a79053415			4 ROPS & ALR6809B	
flat tire repair kit	40			https://www.amazon.com/Boulder-Tools-Motorcycle-Trailer-Puncture/dp/B01E635PGA/ref=sr_1_72?pf_rd_p=80663488-428b-4e91-8901-7c4a79053415			4 FLAIL MOWERS & L4554\$9,821.00	
60GST Tractor attachments: (counted from above)	34,444						(L4457)	
							1 72" QUICK ATTACH HEAVY DUTY ROUND BACK BUCKETS	\$1,221.00
Total	47038							(L2296)
Used tractor instead:	12594						1 MANUAL HITCH	\$2,632.00
							(L4455A)	
							1 MID PTO KIT	\$429.00
							(L8387)	
							1 REAR WORK LIGHT KIT (QTY 1)	\$99.00
							(L8329)	
other options for tractors in used market							1 FRONT LOADER PACKAGE (LIFT CAPACITY 1,784 LBS)	\$5,693.00
John Deere 4720							(LA1055)	
Kubota L6060							1 PLASTIC CANOPY KIT	\$487.00
							(E1133)	
							2 RUBBER SHOES	\$284.00
							(L9467)	
							1 9 FT BACKHOES	\$8,947.00
							(BH92)	
							1 42" PALLET FORKS	\$542.00
							(K9058)	
							1 LOWER GRILL GUARD FRONT SUPPORT	\$134.00
							(L4481)	
							1 MID PTO INTERNAL GEAR KIT	\$283.00
							(L8316)	
							1 COMPL KIT/72" FLAIL MWR/MANUAL HITCH	\$363.00
							(L4448)	
							1 PALLET FORK FRAME TWO-LEVER QUICK ATTACH TYPE	\$772.00
							(L2238)	
							1 SUBFRAME KIT FOR BACKHOES	\$1,074.00
							(BH4999)	
							1 BH92 MTG KIT/L4060/L4760/L5060/L5460/L6060 for ROPS models	\$415.00
							(BH4989)	

								FACTORY ASSEMBLY\$105.00		
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object	price	quantity	endprice	location	option 2	comments		
plastic tray boxes		6-7		(18.5cm) https://	(25 cm) https://www.estra.com/p/caja-en-colores-de-60-x-40-x-25-cm/			
window screens								
trays to contain boxes								
10x20 netting for "love cages"		15	5					
labor and zip ties for making cages		5	10					
scale								
"Dark cages" grow tents								
shredder								
pelletizer								
oven								
50lb oats		75		https://www.highmowingseeds.com/organic-non-gmo-oats-c.html				
carrots	from farm							
	https://www.youtube.com/watch?v=TNvtPnSoYdk							

Books:				
Beekeeping For Dummies	13			https://www.amazon.com/Beekeeping-Dummies-Lifestyle-Howland-Blackiston-ebook/dp/B01MSDFPKG/ref=pe_sim_351_27_encoding=UTF8&psc=1&refRID=211QVZG3TB8R87Z4ZAG2
The Backyard Beekeeper - Revised and Updated, 3rd Edition	10			https://www.amazon.com/Backyard-Beekeeper-Revised-Updated-3rd-ebook/dp/B00KJ26FUU/ref=pe_sim_351_67_encoding=UTF8&psc=1&refRID=211QVZG3TB8R87Z4ZAG2
building beehives	11			https://www.amazon.com/Building-Beehives-Dummies-Howland-Blackiston-ebook/dp/B00AM1WC9E/ref=pe_sim_351_107_encoding=UTF8&psc=1&refRID=211QVZG3TB8R87Z4ZAG2
100 plants to feed	19			https://www.amazon.com/100-Plants-Feed-Bees-Pollinators-ebook/dp/B01N8YTL5/ref=pe_sim_351_207_encoding=UTF8&psc=1&refRID=211QVZG3TB8R87Z4ZAG2
Manuka the biog	23			https://www.amazon.com/Manuka-extraordinary-Cliff-Van-Eaton/dp/1775591638/ref=sr_1_37?ie=UTF8&qid=1528956819&sr=1-3&keywords=holistic+beekeeping
Tending bees				
bee castle suit, jh	31			https://www.amazon.com/BEECASTLE-Beekeeping-Beehive-Necessary-Keeping/dp/B078H8XND8/ref=sr_1_107?ie=UTF8&qid=152895454&sr=1-10&keywords=bee+hive
beekeeping tool i	45			https://www.amazon.com/Risetime-Beekeeping-Smoker-Accessory-Keeping/dp/B00XTSA92E/ref=pe_sim_86_237_encoding=UTF8&pd_rd_w=B00XTSA92E&pd_rd_wt=P8Z9XN49TYGTOQPVYEFM9D&pd_rd_wg=HwHJ&psc=1&refRID=P8Z9XN49TYGTOQPVYEFM9D
wood pellets	12			
beekeepers jour	15			https://www.amazon.com/Beekeepers-Journal-Illustrated-Beekeeping-Adventures/dp/1592538878/ref=pe_sim_14_37_encoding=UTF8&pd_rd_wt=1592538878&pd_rd_w=1592538878&pd_rd_wg=F2W3TEY2AORZBS796EK&pd_rd_wg=SpIDu&psc=1&refRID=F2W3TEY2AORZBS796EK
swarm lure hang	13			https://www.amazon.com/Blythewood-Bee-Company-Commander-HoneyBee/dp/B073X216R2/ref=sr_1_41?ie=UTF8&qid=152896017&sr=1-41&keywords=bee+hive
swarm lure vials	20			https://www.amazon.com/Swarm-Commander-Lure-Vials/dp/B073X2FY5B/ref=pe_sim_86_87_encoding=UTF8&pd_rd_wt=B073X2FY5B&pd_rd_w=B073X2FY5B&pd_rd_wg=24RFBW0Y9F2JZGP82YK&pd_rd_wg=Yma2G&pd_rd_wg=2QoB&psc=1&refRID=24RFBW0Y9F2JZGP82YK
bee properties 1C	40			https://www.amazon.com/Mann-Lake-FD357-Patties-10-Pound/dp/B00B8L5UMS/ref=pe_sim_86_87_encoding=UTF8&pd_rd_wt=B00B8L5UMS&pd_rd_w=MRSQGR0GQKFE08ET4WFR&pd_rd_w=Y6B&pd_rd_wg=wDq3J&psc=1&refRID=MRSQGR0GQKFE08ET4WFR
Honey Refractor	25			https://www.amazon.com/dp/B01LWAFVNN/ref=sspa_dk_detail_37?psc=1
5 gallon honey bi	19			https://www.amazon.com/Little-Giant-Farm-Ag-RKT5/dp/B00PX93XZM/ref=pe_bxay_86_27_encoding=UTF8&pd_rd_wt=B00PX93XZM&pd_rd_w=7816WDXJEW28D2BXP88&pd_rd_w=8TXPn&pd_rd_wg=ietp8&psc=1&refRID=7816WDXJEW28D2BXP88
2 frame manual c	135			https://www.amazon.com/dp/B00A4KHBSK/ref=twister_B07BH82N1X7_encoding=UTF8&h=1
bee keeping stair	6			https://www.amazon.com/ZXUY-Keeping-Stainless-Steel-Uncapping/dp/B00HP4UR68/ref=pe_rhf_dp_e_pd_session_scf_1_67_encoding=UTF8&pd_rd_wt=B00HP4UR68&pd_rd_w=B31K4MKCHDB4FINHG3EE&pd_rd_w=7R90&pd_rd_wg=rtiSS&pd_rd_wg=deaktop-rhf&pd_rd_wt=ATVPDKIKX0DER&pd_rd_w=5643445730259912224&pd_rd_wt=rsB31K4MKCHDB4FINHG3EE&pd_rd_wg=deak
uncapping knife	11			https://www.amazon.com/WEIFHJUAN-Stainless-Steel-Serrated-Uncapping/dp/B06Z2XKB6Y/ref=pe_sim_86_47_encoding=UTF8&pd_rd_wt=B06Z2XKB6Y&pd_rd_w=F3T8ECBQHTSH4EB7Y8&pd_rd_wt=7J8&pd_rd_wg=XTqB&psc=1&refRID=F3T8ECBQHTSH4EB7Y8
stainless steel dc	17			https://www.amazon.com/Mann-Lake-HH440-Stainless-Double/dp/B00B8L5YVK/ref=pe_sim_86_77_encoding=UTF8&pd_rd_wt=B00B8L5YVK&pd_rd_w=F3T8ECBQHTSH4EB7Y8&pd_rd_wt=7J8&pd_rd_wg=XTqB&psc=1&refRID=F3T8ECBQHTSH4EB7Y8
Beehive	210	5	1050	https://www.amazon.com/Happybuy-Langstroth-Beehive-Layer-Frames/dp/B075V2XCR0/ref=sr_1_7?ie=UTF8&qid=154801541&sr=87
beesuit	110			https://www.amazon.com/profesional-apicultor-ventilado-apicultura-picaduras/dp/B092Q25JX9/ref=sr_1_4_sspa?ie=UTF8&qid=154801541&sr=87
Poultry net prer	156			https://www.premier-supplies.com/p/poultrynet-plus-12-48-3-electric-netting#ez-next
Total	865	w/ 5 extra bee hi	1915	
local nuc sacs				
building plans for hives:				
https://homesleading.com/best-bee-hive-plans-build-a-hive-help-the-bees/				
https://morningchores.com/bee-hive-plans/				

Joel salatin chicken tractor:						
http://www.todaysplans.net/TarterFarm-ChickenCoop.pdf						
Wood						
chicken wire						
nails						
strong rope						
bolts, bike wheels for long distances. when birds brought in.						
<u>Egg mobile</u>						
old RV						
Tin metal 4*4						
wood						
waterstation.						
"ez egg" in plans						
ATV to move						
forums						
https://www.backyardchickens.com/forums/incubating-hatching-eggs.5/						
Richard perkins (ridgedale permaculture) Chicken tractors						
items	price	quanity	total price	link	comments	
10 tool set	1024					
mire table saw						
wood screws						
70 mm length 5mm thinckness		4			100 pack	
40 mm length 4mm thinckness		60			100 pack	
25mm length		24			100 pack	
m6 carriage bolts/washers/nuts						

80mm			8			100 pack		
60mm			40			100 pack		
40mm			26			100 pack		
15mm chicken wire			20			meters		
plastic corrugated roofing			3			4 meters each		
hose pipe (grip)						40m X2		
2mm high tensile fence wireing			10			meters		
cable ties								
ushaped fence nails			4					
roll of heavy duty buildnig plastic 7 meters X .6 meters						140cm		
fence wire insulation pipe								
wood and cuts (cm)								
CentiMeters	inches		feet			inches	feet	
28X 45 mm treated timber						1.1"X2"		
403	158.6614173		13.22178478	4	1612			
295	116.1417323		9.67847769	4	1180			
188	74.01574803		6.167979003	4	752			
150	59.05511811		4.921259843	2	300			
136.5	53.74015748		4.478346457	4	546			
60	23.62204724		1.968503937	12	720			
Total CM					5110		2011	167.5833333
28X90mm treated timber						1.1X4"		
397	156.2992126		13.02493438	1	397			
295	116.1417323		9.67847769	1	295			
total CM					692		272.5	22.70833333
45X45 mm treated timber						2"X2"		
150	59.05511811		4.921259843	1	150			
142.5	56.1023622		4.67519685	1	142.5			
Total Cm					292.5		115.15	9.595833333

18X70 mm treated timber					.7"x2.75	
242	95.27559055	7.939632546	2	484		
201	79.13385827	6.594488189	4	804		
200	78.74015748	6.56167979	1	200		
146	57.48031496	4.790026247	4	584		
84	33.07086614	2.755905512	1	84		
78	30.70866142	2.559055118	2	156		
71	27.95275591	2.329396325	2	142		
65	25.59055118	2.132545932	2	130		
60	23.62204724	1.968503937	8	480		
total CM				3064	1206	100.5

FIXED COSTS, Variable COSTS below!	price	quantity	end price	source	other
Chickens	1.43	240	343.2		
Egg incubator 1056 capacity	1700	1	1700	https://www.walr	Purchased after a while of using smaller incubators
netting					
Poultry net premier100ft 12/48/3	156	6	936	https://www.premier1supplies.com/p/poultrynet-plus-12-48-3-electric-netting#ez-next	
1.5 Joule energizer	111	1	111	http://www.flemingoutdoors.com/1-5-joule-electric-fence-energizer--de-600.html	
Feed					
2 gallon water	30	5	150	https://www.amazon.com/Gallon-Chicken-Waterer-Horizontal-Nipple/dp/B0756P9KN5/ref=pdf_sim_199_38?_encoding=UTF8&pd_rd_i=B0756P9KN5&pd_rd_r=FGF3432CNSPCJ5R7ES76&pd_rd_w=WQMCp&pd_rd_wg=Wfzxe&psc=1&refRID=FGF3432CNSPCJ5R7ES76	
7 lb plastic poultry feeder	10	5	50	https://www.amazon.com/Harris-Farms-Plastic-Hanging-Poultry/dp/B006ZJHDO6/ref=pdf_sim_199_38?_encoding=UTF8&pd_rd_i=B006ZJHDO6&pd_rd_r=FGF3432CNSPCJ5R7ES76&pd_rd_w=WQMCp&pd_rd_wg=Wfzxe&refRID=FGF3432CNSPCJ5R7ES76&th=1	
brooding					
150w 110A ceramic heat bulb	12	8	96	https://www.amazon.com/BYB-Ceramic-Infrared-Emitter-Brooder/dp/B00HFNZ59Q/ref=pdf_sim_199_8?_encoding=UTF8&pd_rd_i=B00HFNZ59Q&pd_rd_r=FGF3432CNSPCJ5R7ES76&pd_rd_w=WQMCp&pd_rd_wg=Wfzxe&psc=1&refRID=FGF3432CNSPCJ5R7ES76	
clamp light	8	8	64	https://www.amazon.com/dp/B071WJPLW2/ref=sspa_dk_detail_0?psc=1&pd_rd_i=B071WJPLW2&pd_rd_wg=63zAS&pd_rd_r=V69HSYD2W3T1W0A5XE6D&pd_rd_w=f4f6m	
170 ct incubator	210	2	420	amazon.com/dp/B004XNVC70/ref=sspa_dk_detail_4?psc=1&pd_rd_i=B004XNVC70&pd_rd_wg=HDW97&pd_rd_r=JW1A26718PRNSECVNPTN&pd_rd_w=agR0u	
light egg candler tester	20	2	40	https://www.amazon.com/Magicfly-Bright-Light-Candler-Tester/dp/B00KCKNYCY/ref=pdf_sim_86_1?_encoding=UTF8&pd_rd_i=B00KCKNYCY&pd_rd_r=VT6D3TVNZKAKORAKYWEG&pd_rd_w=vHsUC&pd_rd_wg=JKFO&psc=1&refRID=VT6D3TVNZKAKORAKYWEG	
shavings	12	2	24		
grit	9	2	18		
total	3556.2		3952.2		
More expensive cost					
refurbish a motorhome to a "egg mobile"	1500				
chicken tractors.	250 each				
feed:	1000				
Grower feed					
Corn 52%					
Roasted Soybeans 29%					
Crimped Oats 11%					
Feed Grade Limestone (Aragonite) 1%					
Fertrell Nutri-Balancer 3%					
Fish Meal (sea-lac) 3.5%					
Kelp Meal .5%					
Fastrack probiotic .1%					
TOTAL: 100.1					
JOAL SALATIN LAYER RATION: 49.7% Corn					
49.7% Corn					
30.8% Roasted Soybeans					
10.9% Oats					
5% Aragonite (ground mussel shells).					
3% Fertrell Nutri-Balancer (bacterial cultures, probiotics and minerals)					
.5% Kelp Meal					
Keep feed in rotation being soaked for no longer than 3 days.					
Variable costs					
buying bags here's the math:					
50 lb bags	\$22				
3400 lbs for 220 birds	1500				
Labor: 60 min day	12				
78 days *12	936				
"processing"	1000				
gas to drive	50				
total	3486				

Chicken Processing Facility					
items	price	quantity	total price	link	comments
Kide commercial	5000	1	5000	https://www.ebay.com/itm/203515359676	
Chicken plucker	489	1	489	https://www.amazon.com/dp/B076VW45J6?tag=eggis-20&linkCode=osi&th=1&psc=1&keywords=Chicken%20Plucker	
scalders #1	118	2	236	https://www.amazon.com/King-Kooker-Propane-Outdoor-Package/dp/B07Y5V9WFJ/ref=ser_1_5?zrid=317R86W3LAQIT&keywords=chicken+scalders&qid=1647275772&prefix=chicken+scalde%2Caps%2C224&sr=8-5	
heat resistant glo	20	4	80	https://www.amazon.com/dp/B07YCZQ2K9?ref=sspa_dk_detail_2?psc=1&od_rd_1=B07YCZQ2K9&od_rd_w=1HL0A&of_rd_psb9951ce4-3bd8-4b04-9123-0fa35d6155e&od_rd_wgsuixy=7&of_rd_1=VFREYX0C41X7WGTSSNHN&od_rd_mec8cdc8-ad70-4f50-940e-456e46cd903e&slawn.garden&sl=Laz2W5icrhvGvXUxvhGImaWVYPUExOEVOOTJQNVExMIRKJmVvY3J5GHRIZF	
poultry shrink bag	29	10	290	https://www.amazon.com/Poultry-Chickens-Rabbits-w/Included-Freezer/dp/B018V3TUAJ/ref=ser_1_17?zrid=317R86W3LAQIT&keywords=chicken+scalders&qid=1647275772&prefix=chicken+scalde%2Caps%2C224&sr=8-17	
Metal sinks	1000				
racks	70	4	280	https://www.amazon.com/Amazon-Basics-Adjustable-Shelving-Organizer/dp/B01M0A4B9M/ref=ser_1_58?zrid=1V8S1VLQJ21QE&keywords=stainless%2Bsteel%2Bbracks%2Bfor%2Bkitchen&qid=164727329&prefix=stainless%2Bsteel%2Bbracks%2Caps%2C208&sr=8-58&th=1	
Scale	165	2	330	https://www.amazon.com/VisionTechShop-Computing-Switchable-Capacity-Readability/dp/B07TYGWCQ3/ref=ser_1_17_spa?zrid=2JVVMANSH8FE6&keywords=agricultural+scale&qid=1647276780&prefix=agricultural+scal%2Caps%2C188&sr=8-17_spons&psc=1&amid=A3OONGCYJ3BU4L&spL_a=2V5jontwGVXUxvhGImaWVYPUExTO1RINISVhUJzhQJmVvY3J5GHRIZElkPUeW	
food grade crater	50	6	300	https://www.webstaurantstore.com/araven-25-5-8-x-20-7-8-x-15-white-plastic-food-storage-box-0407015904070.html	
			7005		

Vortex brewer				
1 1/2 in X10 ft pv	6.12			https://www.homedepot.com/p/1-1-2-in-x-10-ft-330-PSI-Schedule-40-PVC-DWV-Plain-End-Pipe-531111/100135041
1 1/2 in 90° pvc	1.82	4		https://www.homedepot.com/p/Charlotte-Pipe-1-1-2-in-PVC-Sch-40-90-Degree-S-x-S-Elbow-PVC023001400HD/203812129
air stones + pumps to play around w/ microscope				
Tubing	12.91			https://www.amazon.com/Flexible-Airline-Aquariums-Terrariums-Hydroponics/dp/B01HBSU9EA/ref=sr_1_34?ie=UTF8&qid=1548883046&sr=9-34&keywords=airstone
950 gph pump	37.99			https://www.amazon.com/dp/B06XDKRYC6/ref=sr_ba_sxwds-stopp_37pf_rd_p=82218735-2b20-4c14-b867-9b4d6b044350&pd_rd_wg=G7Kt8pf_rd_r=3Q2356W88DW9WGDZ21CT&pd_rd_i=B06XDKRYC6&pd_rd_w=W5ya&pd_rd_r=8068821c-8e0b-4efb-9d09-058fa38e4533&ie=UTF8&qid=1548883046&sr=3
1750 gph air purr	75.99			https://www.amazon.com/dp/B072N2HPWB/ref=sr_ba_sxwds-stopp_37pf_rd_p=82218735-2b20-4c14-b867-9b4d6b044350&pd_rd_wg=G7Kt8pf_rd_r=3Q2356W88DW9WGDZ21CT&pd_rd_i=B06XDKRYC6&pd_rd_w=W5ya&pd_rd_r=8068821c-8e0b-4efb-9d09-058fa38e4533&ie=UTF8&qid=1548883046&sr=3&h=1
3 pce 7.7" air sto	9.88			https://www.amazon.com/Suction-Release-Airstone-Aquarium-Hydroponics/dp/B07QNSC6N2/ref=sr_1_41_a_1?ie=UTF8&qid=1548883100&sr=8-41&keywords=airstone
10 pack 1" air stc	6.99			https://www.amazon.com/CO-RODE-Aquarium-Aerator-Airstones/dp/B01M3P1FZ7/ref=sr_1_46?ie=UTF8&qid=1548883100&sr=8-46&keywords=airstone
3 pack 5" round i	20.97			https://www.amazon.com/ViaGrow-Airstone-Round-Disc-Diffuser/dp/B01KML6Y8S/ref=sr_1_18?ie=UTF8&qid=1548882997&sr=8-18&keywords=airstone
4" ball shaped dif	11.2			https://www.amazon.com/Pawfly-Airstones-Diffuser-Aquarium-Hydroponics/dp/B06XFZ46JZ/ref=sr_1_16?ie=UTF8&qid=1548882997&sr=8-16&keywords=airstone
2 pack Wooden c	8.99			https://www.amazon.com/Leas-2-Inch-Wooden-Diffuser-2-Pack/dp/B0002APU8P/ref=sr_1_46?ie=UTF8&qid=1548883100&sr=8-46&keywords=airstone&h=1
36" flexible hose	14.86			https://www.amazon.com/Company-Animals-Aqua-Flexible-Stone/dp/B0006JK06A/ref=pf_rd_p=0_n1_199_6130-6478517-0930337_encoding=UTF8&pd_rd_i=B0006JK06A&pd_rd_r=0e5d9c22-2494-11e9-b262-53751d062340&pd_rd_w=Um0d&pd_rd_wm=vHkr&pd_p=907871c-e646-4161-82c7-5ed04c85b07&pf_rd_r=J0R1CCKW5F9VJG6JKKNP&psc=1&refRID=J0R1CCKW
2/ gph wavemak	27.99			https://www.amazon.com/Hygae-Submersible-Powerhead-Circulation-Freshwater/dp/B078GVZ1Y1/ref=pf_rd_p=0_n1_199_2130-6478517-0930337_encoding=UTF8&pd_rd_i=B078GVZ1Y1&pd_rd_r=a30ea00c-2496-11e9-afca-87394bc783f5&pd_rd_w=9IEY&pd_rd_wm=x6m1b&pf_rd_p=907871c-e646-4161-82c7-5ed04c85b07&pf_rd_r=6CJFDZGGDFFPQ6FVMTZ&psc=1&ref
Total	227.89			
Buckets				
32 gal rubber ma	47.36			https://www.amazon.com/Rubbermaid-Commercial-FG263200DGRN-Products-Capacity/dp/B074C752X7/ref=pf_sim_328_13?encoding=UTF8&pd_rd_i=B074C752X7&pd_r=490abe17-2576-11e9-b0de-212d94c64fa6&pd_rd_w=c8heX&pd_rd_wg=Lygd&pd_p=90485860-53e9-4fd9-b838-b28a9e75a30&pd_r=DTRGK7V5AFQMR4ZBX0&psc=1&refRID=DTRGK7V5AFQ
(2) 55 gal drum	107.5			https://www.amazon.com/Emergency-Essentials-Water-Barrel-Gallon/dp/B0753X8MWM/ref=pf_sbs_468_5/140-0807003-7841864?encoding=UTF8&pd_rd_i=B0753X8MWM&pd_rd_r=0500bc61-2574-11e9-9ef7-8b5d9e2dca4&pd_rd_w=84JOr&pd_rd_wm=WBj&pf_rd_p=588939de-d3f8-42f1-a3d8-d556eae5797d&pf_rd_r=ERCTSER50T2Z9CMZ788&psc=1&refRID=ERCTSER5
55 gal cone bottc	153.14			https://www.usplastic.com/catalog/item.aspx?sku=14440&clid=EAlaQobChMjaZ87aY4iVwUSGCh2e5pKvEAYDCABEGJwzd0_BwE
total	308			
Extras:				
tubing (HPVC)	40			
fittings	45			
drill and attachm part of construction				
water heater adjc	40.99			https://www.amazon.com/hygae-Submersible-Adjustable-Heat-Resistant-Controller/dp/B07G4BKPH8/ref=sr_1_47?ie=UTF8&qid=1548954606&sr=8-4&keywords=adjustable+aquarium+water+heater&refinements=p_72%3A2661618011
caulking tools	6			https://www.amazon.com/Caulking-Pieces-Sealant-Silicone-Finishing/dp/B07C79Q3C2/ref=sr_1_2?ie=UTF8&qid=1548953223&sr=8-22&keywords=dinking+water+safe+sealant&psc=1
food grade sealie	9.25			https://www.amazon.com/Grade-Silicone-Sealant-Adhesive-10-3oz/dp/B01F9HCJ5J/ref=sr_1_47?ie=UTF8&qid=1548953486&sr=8-4&keywords=for+food+grade+sealant
total	141.24			
Total	677.13			
in composting, meat and dairy should go towards bokashi, not your regular compost pile				
tools				
pitch fork				
shovel				
rake				
hammer				
nails				
AACT brewer ideas:				
microbulator airt	http://www.microbeorganics.com/#Contents			
1 inch pvc tubing				
T PVC 1"				
L PVC				
25 gallon compo	http://extension.oregonstate.edu/lane/horticulture/documents/25gallonRubbermaidbrewerplans_2.pdf			
pump:	active aqua 70l			
ppump option 2				
Fancy vortex mic	https://www.youtube.com/watch?v=aWJgJobjU08			
DIY super cheap	https://www.youtube.com/watch?v=RVkhhzEwNI			
	growinginsolutions.com			

comparisons											
item	quantity	price per	end price	website	item	quantity	price per	end price	website	notes	
10'36'				10x48	10x48						
Gothic peak cross connec	10				Gothic peak cross connec	13					
snap clamps	20				snap clamps	26					
coupler/splc	40				coupler/splc	40					
uv poly cover 24X50	9				uv poly cover 32x62	12					
1 5/8 30" tubing f	36				1 ea. Bending Instructions						
1 3/8 fence tubin	20				1 5/8 30" tubing f	46					
1 EMT piping	36				1 3/8 fence tubin	26				choose EMT or 1.375 tubing change stake size if emt is chosen	
					1 EMT piping	46					
All greenhouse hoops must be 12 to 30 inches wider across the base than the Installed Width.											
hoop bender table											
pallets	4										
2x4x8	2										
Stakes	4										
1x4x8 Brace	2										
hoop bender	12ft										
To start with purchase only enough tubing to build one or two test hoops. The reason for this is simple; some tubing these days, can be made from a softer base metal. Because tubing springs back (rebounds) after being bent. tubing made from softer metal than normally does not spring back as much after bending, which can result in a hoop that is under size. EXAMPLE: if your hoop is to be a 12 ft wide hoop. As discussed on the previous page, your finis											
greenhouse plan help:											
http://extension.colostate.edu/publications-2/blueprints-and-housingequipment-plans/blueprints-greenhouse-plans/											
http://extension.colostate.edu/publications-2/blueprints-and-housingequipment-plans/											
http://www.pvcplans.com/pvc-greenhouse.htm											
https://www.epicgardening.com/greenhouse-plans/											
https://www.google.com/shopping/product/1683401603455144477?q=plans+for+greenhouses&biw=1422&bih=781&ecds=pair_ClkAsKraX-OKe3K2xO0wcnY1GJk0YGEwRlwkENv2Bx15Uino7XBGGUG_DRopsCB0fDWp85EilwJSeD-vrPYC-DrtSHM8QByc-ICm6uGRcaNAm9EFB1bnRiZAFVh7Z2SYDWhS0SZL8hizf2PzNecNrpSsa=X&ved=0ahUKEw2oDg9fnaAhUX5GMMKHo03BT4Q8wll8gl											

Growsheet	cheap	amazon choice	price 1	price 2
basics for green house				
grow tent		https://www.ama	80	100
fan	https://www.ama	https://www.ama	32	46
humidity/temp		https://www.amazon.com/AcuRite-		10
clone				
light		https://www.amazon.com/Hydrople		135
cloner (20 site)		https://www.amazon.com/Viagrow-		60
Cloner 144 site		https://growershouse.com/turboklo		428
light hangers X4 (2 sets)		https://www.amazon.com/MARS-H		10
TDS/EC/TEMP meter		https://www.amazon.com/Newdy-T		14
PH meter		https://www.amazon.com/Newdy-A		14
100 pack 806		https://www.greenhousemegastore		69
100 pack trays		https://www.greenhousemegastore		99
100 pack 1020 daisy trays (for eas		https://www.greenhousemegastore		90
total				817
trays				258
Grand total				1075

item	price	quantity	end price	url	comments
2.5 g glass storage	19.73	10	197.3	https://www.amazon.com/Anchor-Hocking-Montana-Airtight-Brushed/dp/B000RMTG3S/ref=pf_dp_vtph_79_J	
5g Glass carboys	41.28	10	412.8	https://www.amazon.com/Homebrewers-Outpost-FE320-Carboy-Gallon/dp/B074D9F4MS/ref=sr_1_3_s_it?=:g	
Twin Bubble Airlock and carbo	3.25	20	65	https://www.amazon.com/Twin-Bubble-Airlock-Carboy-Bung/dp/B00A6TRKQ4/ref=pd_bxgy_328_2?_encoding:	
Brew Tapper Triple scale Hydr	12.99	2	25.98	https://www.amazon.com/dp/B00TUQIBG0/ref=sspa_dk_detail_0?psc=1&pd_rd_i=B00TUQIBG0&pd_rd_wg=W	
spectrometer	21.49	2	42.98	https://www.amazon.com/dp/B01M1GLSSF/ref=sspa_dk_detail_1?psc=1&pd_rd_i=B01M1GLSSF&pd_rd_wg=i6	
standar seawater 35 ppt refrac	9.95	4	39.8	https://www.amazon.com/Standard-Seawater-Refractometer-Calibration-Solution/dp/B0053DSWJA/ref=sr_1_1	
EC/tds meter	12.69	2	25.38	https://www.amazon.com/dp/B06XC6CV9I/ref=sspa_dk_detail_3?psc=1&pd_rd_i=B06XC6CV9I&pd_rd_wg=E7I	
PH meter	18.99	2	37.98	https://www.amazon.com/GlowGeek-Household-Hydroponics-Aquariums-Resolution/dp/B075CGZZN/ref=sr_	
starter kit	450	1	450	https://www.morebeer.com/products/premium-beer-brewing-kit-kegging-system.html	
Ferments					
16 oz 12 pack Mason jars	24.99	5	124.95	https://www.amazon.com/Ball-61000-Regular-16-Ounces-12-Units/dp/B07M297158/ref=sr_1_3?crd=NP4SYLLZS6U7&keywords=mason+jars&qid=1647637420&sprex=mason+jar%2Caps%2C255&sr=8-3	
6 pck mason jar ferment lids	19	9	171	https://www.amazon.com/Fermentation-Stainless-Fermenting-Silicone-Grommets/dp/B086VHYD JW/ref=sr_1_12?crd=1OSAETH9DYI XU&keywords=mason%2Bjar%2Bfermentation&qid=1647637177&sprex=mason%2Bjar%2Bfermentation%2Caps%2C220&sr=8-12&th=1	
9 pack weights for mason jars	22	6	132	https://www.amazon.com/Juocan-Fermentation-Weights-Fermenting-Vegetables/dp/B08G4J8X43/ref=sr_1_16?crd=1OSAETH9DYI XU&keywords=mason+jar+fermentation&qid=1647637177&sprex=mason+jar+fermentation%2Caps%2C220&sr=8-16	
coffee paper sheets					
total	590.37		1725.17		

Construction	3	
Mechanic	0.5	
Animal work (chickens, cows)	2.5	
bug work	0.5	
"scientist" fermentations, data logging etc	1	
Gardeners	2.5	
	10	\$30k per year
		300