

Incubator for Infant Wildlife (Wildlife Incubator Team) BME 402

Client: Dr. Mark Stelford

Advisor: Dr. Walter Block

Team: Tanishka Sheth (Leader + Communicator) - tsheth@wisc.edu

Loukia Agoudemos (BPAC) - lagoudemos@wisc.edu

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Date: 3/8-3/14

Problem statement

Wildlife rehabilitation often includes caring for neonatal wildlife who are unable to control their own body temperature, thus the incubator must provide supplemental temperature control. Although private parties frequently contribute to wildlife rehabilitation efforts, they do not have enough financial resources to purchase an incubator. As such the wildlife incubator must be low-cost, durable, modular, easy to clean, and precise in temperature control. It is essential to create an incubator that is more accessible and accommodating for those interested and passionate about wildlife rehabilitation but may lack the financial resources to purchase components currently available in the market.

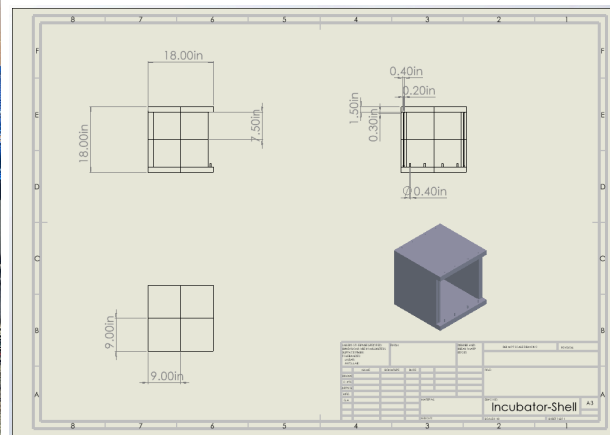
Brief status update

The exterior shell design has been created. The circuit is still being workshopped. The team also was doing an outreach activity to fulfill class requirements so most of the time this week was in creating the presentation and materials for the activity.

Difficulties / advice requests

Getting the PID controller to help decrease oscillations. The code and control theory are proving to be challenging.

Current design



Materials and expenses

Item	Description	Manufacturer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Category 1										
									\$0.00	
									\$0.00	
Category 2										
									\$0.00	
									\$0.00	
								TOTAL:	\$0.00	

Major team goals for the next week

1. Finalizing the circuit and begin testing with the new shell

Next week's individual goals

- Tanishka:
 - Complete circuit with the new parts that were received and begin gathering data for preliminary testing
- Loukia:
 - Help integrate new parts in the circuit and help with preliminary testing/putting entire design together.
- Sophia:

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- Erwin:
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Timeline

Task	Jan	Feb				March					April				May	
	26	2	9	16	23	1	8	15	22	29	5	12	19	26	3	10
Project R&D																
Designing	X	X	X	X	X	X	X									
Prototyping				X	X	X	X									
Testing																
Feedback																
Deliverables																
Progress Reports	X	X	X	X	X	X										
Prelim presentation			X													
Final Poster																
Meetings																
Client																
Advisor	X	X	X	X	X		X									
Website																
Update	X	X	X	X	X	X	X									

Filled boxes = projected timeline

X = task was worked on or completed

Previous week's goals and accomplishments

- Team:
 - Prototyping has been moving forward and the team will begin testing before spring break
- Tanishka:
 - Continue working on the circuit
 - Completed outreach activity
- Loukia:
 - Completed 402 outreach activity
 - Assist with prototyping
- Sophia:
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- Erwin:
 -

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Tanishka Sheth	3/8-3/14	Received new parts, working on new design	1	1	12.5
Loukia Agoudemos	3/8- 3/14	Assisted with prototyping, completing outreach activity	4	4	13
Erwin Cruz			3	3	9
Sophia Finn			2	2	10.5