

Friends of He'eia State Park
Environmental Education Internship

Justin Wiley

Advisor:

Carole McLean

Executive Director, Friends of He'eia State Park

Proposal Submitted:

December 9, 2002

Project Duration:

January 13, 2003 – May 1, 2003

This spring I interned with the Friends of He'eia State Park at *Ka lai o Kealohi*, with the duties of facilitating environmental internship programs for elementary students. The Friends of He'eia are a non-profit organization that wishes to protect *Kealohi* point from development and foster a sense of land stewardship in the youth through environmental education programs.

My internship has been a learning process from the very beginning. When I began to write a proposal on what sort of internship I would be doing, I really had no idea what to write or what to expect. My objectives were to gain experience working with kids as an advisor or leader and to learn a bit about the marine environment along the way. I learned much more than I could have imagined.

On the first day of the internship I met Carole, the administrator, and the other interns, Beth and Bethanie. Carole briefed us on what we'd be doing and issued us the reading materials we were to study and teach. Over the next couple days she gave us training sessions to prepare us for the groups of students. She ran us through the daily program, which I will detail later. She also gave us tips on crowd control, working together with the teachers and chaperones, and keeping on schedule, among other things. However nothing could prepare us more than the real thing, so our next meeting was just that.

The group arrived at about 8:45 in the morning and we greeted them as they came off the bus. We led them inside to the main hall and had them sit down on the floor while Carole welcomed them and gave a short lesson on the *Ahupua'a* and good land stewardship. Meanwhile, we gathered the adults (chaperones and teachers) to brief them

on what to expect for the day and told them they could help with crowd control. We took this time to collect the check from the teacher.

After the welcoming *Ahupua'a* lesson (approximately 15 min) we split the students into two groups and Carole and Bethanie led one group outside for a tour around the park, while Beth and I had the other group stay seated to learn about Hawaiian methods of fishing. We had some bamboo fishing poles, a crab catcher, and a *he'e* lure along with some stuffed animal fish, crab and octopus. We got the kids involved by asking them if they knew how each worked and having volunteers hold the animals as we pretended to catch them with the tools. It was always interesting to hear their responses when we held up the *he'e* lure and asked them what it was. (It is a large fish hook concealed by feathers and fastened with raffia twine to a cowry shell.) Most thought it was a hammer or some sort of tool or decoration. We wrapped things up by showing them our crabbing nets and describing how we'd be using them down at the reef. After a quick briefing on the safety rules, we gathered them in a line and proceeded down to the reef.

The way it works is one group takes a tour around the park, then has a lesson in the Hale while the other group has a quick lesson on fishing in the main hall, then goes down to the reef to catch crabs and explore the reef environment. After 45 minutes the groups switch activities for another 45 minutes. After this they gather in the parking lot to catch the bus down to the Marina for the glass bottom boat ride. This is where timing becomes crucial because the bus comes at exactly 10:30 so we can't spend too much time on any one segment. Unfortunately, it always seemed that time was against us during these 45 minute segments, something I will discuss more later.

The crabbing segment is always fun. We led the students alongside the parking lot, single-file, down the dirt path, and to the *milo* trees in front of the reef, where we gave them further instructions. We helped them bait their nets with squid, then had them go out into the water to place their nets and then come back ashore. The idea is to wait for the crabs to smell and find the meat, then return quietly 15 minutes later and pull up the net. Of course the kids always spent lots of time walking around in the water, looking for the perfect spot for their net, or trying to capture things with their net. So we ran out of time pretty quick this first time.

Usually we'd try to squeeze in a lesson on the invasive alien mangroves that are causing problems at the bay, but by the time they fetched their nets again we had to hurry them back up the trail to the parking lot to switch with the other group. As we got better with our timing we learned to keep the fishing introduction part really brief and to make sure they knew to drop their nets and return immediately. It also worked out well to have the mangrove lesson while they're waiting for the crabs to find their nets. If we kept things moving, then they still had enough time to explore the reef a bit after they checked their catch, and before heading up to the parking lot.

During the mangrove lesson we would start by asking if anyone knew what an invasive alien was. We could then jokingly ask if it's some sort of Martian from space. (It's usually pretty effective to start out a lesson with a question because it grabs their attention and gets them involved.) After explaining the dangers of the mangrove invasion, we'd take them on a little nature walk up the stream to show them how the mangroves are taking over the streamside. If we had time, we'd have them help out by pulling out mangrove seedlings (which they gladly participate in if you turn it into a

contest of who can pull out the most). After awhile we'd lead them back to the reef and have them, slowly and quietly, (-yeah right!) go and check their nets. Usually about half of them would catch something, while the others were too noisy or the crab bailed while they were pulling up the net. Often I would do the crabbing section back to back and leave the tour to the other intern.

For the tour, we'd take the group around the main hall and through the gardens in the back, pointing out the valleys that make up the *He'eia ahupua'a*, the various islands that are visible from the point (including Coconut Island), the various native plants and trees growing around the point, and especially the three types of coral reef, which all are visible from *Kealohi* point.

The tour would end at the learning *hale*, which is filled with all kinds of things for the students to check out: aquariums, corals, shells, whale bones, Hawaiian instruments, volcanic rocks, and more. My favorite was the giant lobster claw, which was about a foot long! We'd give the kids five minutes to explore all the different items, and then gather them for a lesson and science experiment. The educational program is designed so that the teacher can pick between a coral reef lesson or fish painting/printing, based on what they are currently studying at school. I only did the fish printing once, so it seems that the more popular choice is the coral reef lesson, which went as follows.

We'd begin by showing them posters of some enlarged coral polyps, and pointing out their path from Indonesia to Hawai'i on the globe. We'd then pass around some rice coral and lobe coral while we'd explain that each of the individual *puka* once contained a living polyp. To drive this idea home we had them construct their own coral colony. We did this by handing each student a ball of playdough and having them mold it into a coral

polyp, then handing each of them a handful of tiny green rubber squares to serve as zooxanthellae to place in their polyp. Surprisingly most of them, even as young as 2nd grade, were familiar with symbiotic relationships, and would mention the clown fish and sea anemone when I asked them to name one. Next we'd hand out cup cake papers to encase each polyp as the calcium skeleton, then gather everyone's creation together in a tray to form a from a rather colorful coral colony.

The main point we wanted to stress with this lesson was that coral is, in fact, a living animal and that it actually suffers from pollution, runoff, and getting stepped on. One day I demonstrated this most graphically by crushing the completed playdough colony with my fist. The kids were in shock at what I'd done but the teachers got a kick out of it.

Finally it comes time for the most anticipated glass bottom boat ride. The kids board the bus to the marina and I drive over to meet them in the parking lot. I lead them along the docks in a single file line (always in single file) to where the boat is parked, keeping them out of the parking lot for their own safety (safety always comes first). Rhonda greets us as we enter the boat, as well as the captain and the first mate (the diver). I hand the check to Rhonda and she takes over from there. From here on I can just cruise and enjoy the ride, then jump in the water when it's time.

It takes the boat about 20 minutes to reach the patch reef, and Rhonda uses this time to describe the different fish of Kāne'ōhe bay with visuals and point out the different types of coral. When we arrive at the reef, Keola, the diver, jumps in with some slices of bread to attract the fish to the viewing glass beneath the boat. Often Keola would bring extra snorkel gear along and I would join him for this part. This really makes my day

because it's usually very hot about this time and the ocean feels so refreshing. I swim under the boat and wave and make faces at the kids as I pass them by. They scream and laugh, shouting out my name in excitement. It's a wonderful moment.

Next Keola and I gather bubble algae from the reef and put it in a bucket hanging over the side of the boat. The kids go outside on the boat to look for sea turtles while the other interns and I arrange a pile of bubble algae on each table inside the cabin, along with a see-through plastic Tupperware filled with water. This is probably the most fun for the kids as they get to tear the algae apart and look for the different critters living inside, then watch them swim around in the water Tupperware. Even I can't help but join in on this part and look for little fuzzy teddy bear crabs.

This ends the boat ride, and the kids board the bus back to the park to eat their lunches. I take this time to wash out the nets or do any cleanup that is necessary, then call it a day and drive back to town.

This was an outline of the 'typical day' interning at He'eia state park, but this wasn't the only thing we did there. Sometimes we'd have older groups in their teens that would come in to do community service. There were other events such as the family day at the end of spring, when we had a day of good food, live music and dance, with all kinds of games and activities for the kids and families. The family day is aimed at spreading community awareness about the park.

Every other Saturday morning I'd go to He'eia for a community workday. The majority of these workdays were spent clearing out mangrove seedlings from the riverbed and planting *milo* seedlings to replace them. We did this because the mangrove is highly invasive and eventually blocks up the entire river if not kept under control. The *milo* is a

good replacement because it is a native tree and its roots hold the river bank together well and deter erosion. On other days we would pull weeds around the Hawaiian garden and do miscellaneous grounds keeping around the premises. The Saturday workdays were probably the roughest part of the job, simply because no college student wants to wake up at 7:30 on a Saturday morning to pull weeds.

One challenge I had to face with this internship was adaptability. We had groups of anywhere from 15 to 90 students, in grades K-6, and some were older. My ideal group would be about 20 kids in the 1st or 2nd grade because the younger kids are a lot more fun and easier to manage. The one day we had 90 students arrive we had to split them into 3 groups in which one group took the boat ride in the morning while the others were on the tour or crabbing. The biggest challenge was adapting the lesson material, my teaching style, and manor of speaking for the different age groups. For instance when I had groups of 1st and 2nd graders I could keep everything simple and try not to overload them with too much information or I would lose their attention. But with the 4th and 5th graders I always felt I was telling them something they already knew, and I sometimes struggled to bring the information level up a notch. I also had to establish my credibility from the beginning of the day so that the kids would have fun but still take me seriously. I couldn't let them get away with too much in the beginning or else they'd be walking all over me by the end of the day. It took a while for me to get the hang of it all, but by the end of the semester I felt pretty confident handling the groups of students by myself.

Trying to write a proposal about this internship was rather difficult since FHSP didn't have a website where I could gather the necessary information. Therefore, the obvious choice for my final project was to design a website for the Friends of He'eia. I

used Microsoft FrontPage to design the site and included information about the state park, its education programs, community work days, banquet hall rentals, and especially, information about the internship so that future interns will have it easier than I did.

In conclusion, I feel that this internship was a good experience from start to finish. I gained transferable skills of all sorts: from crowd control techniques to learning to wake up at 7 in the morning (something I haven't had to do in awhile). I had good exposure interacting with elementary students, learned how to gain and keep their attention, keep them under control, and the importance in keeping a schedule. I learned that I enjoy working with youth but definitely do not want to be a teacher (yet I have much more respect now for what teachers go through). Through my home study I learned a lot about the Kāne'ōhe bay marine environment, the He'eia fishpond, and some legends about the region. In designing the website I learned my way around FrontPage and Adobe Photoshop quite well. What I would have done differently next time is to learn the material a lot earlier in the semester so that I would be better prepared for the tour and lesson segment.

This was my first job working with kids, but it is only the beginning. This next semester I plan on looking for employment with The Institute For Family Enrichment, serving as a "big brother" figure to an autistic child. This will no doubt be very challenging, but I'm sure it will be a great experience as I might be looking for a career in this area.

Hawaiian words used:

Ka lai o Kealohi – point of shining light

ahupua'a – land division from the mountain to the sea

he'e – octopus

milo – a coastal plant, native to Hawaii

He'eia – “washed out” named after a legend where the people were washed out to sea
during a battle in that area

hale – house

puka – hole

October 24, 2003

Dear Justin,

According to my files, your first day with the Friends of He'eia was February 28th, 2002.
And then:

March 7 – Kapunahala (37)
March 14 – Ahuimanu (21)
March 19 – St. Andrews (Sherwood observed) (33)
March 21 – Kidz Kare (39)
March 28 – YMCA (30)
May 2 – Kama'aina Kids (10)

You also participated in monthly stream clean ups (3) and our Friends of He'eia Family Day.

You also chose to create a WEBSITE for the Friends.
Could you please tell us the web site address so we can review it in that format?

Thank You for Your Participation!



Carole McLean
Executive Director

Friends of He'eia State Park
P.O. Box 698
Kaneohe, HI 96744

**Friends of He'eia State Park Education Program
Evaluation Form**

Teacher Name: D. McPherson Date of Visit: 3-7-03
 School: Kapimānala Grade: 2
 # of Students: 18 # of Adults (Teachers & Chaperones): 3

	Yes	Somewhat	No	Undecided
1. I received the Teacher Confirmation Packet:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I was able to use preparation materials sent:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I can continue to use information presented:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Curriculum was appropriate for age level:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Instructor made it easy to ask questions:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I understood the concepts presented:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My students understood the concepts:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Very Good	Good	Average	Poor
9. Convenience of program schedule (Prefer a Tues./Thurs. schedule? <input type="checkbox"/>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Day's activity schedule	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Preparation of instructor(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. I chose Friends of He'eia's Education Program because it matches our reef curriculum

14. What did you most enjoy about this class? hands on experience -

15. How could the class be improved? _____

16. What other topics or activities would you like to see offered in the future? include how to care/protect bay/oceans

17. Other comments (please feel free to use the back of this form for more space):
Mahalo! Loved the octopus!
 matches
 Waikiki
 Aquarium
 visit

Mahalo for your time! Please return this form to: Friends of He'eia State Park, P.O. Box 698 Kane'ohe, HI 96744

**Friends of He'eia State Park Education Program
Evaluation Form**

Teacher Name: L. Nagamine Date of Visit: 3/7/03
 School: Kapamahalala Grade: 2
 # of Students: 19 # of Adults (Teachers & Chaperones): 2

	Yes	Somewhat	No	Undecided
1. I received the Teacher Confirmation Packet:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I was able to use preparation materials sent:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I can continue to use information presented:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Curriculum was appropriate for age level:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Instructor made it easy to ask questions:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I understood the concepts presented:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My students understood the concepts:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Very Good	Good	Average	Poor
9. Convenience of program schedule (Prefer a Tues./Thurs. schedule? <input type="checkbox"/>)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Day's activity schedule	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Preparation of instructor(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. I chose Friends of He'eia's Education Program because _____

14. What did you most enjoy about this class? hands on activities

15. How could the class be improved? _____

16. What other topics or activities would you like to see offered in the future? _____

17. Other comments (please feel free to use the back of this form for more space):
Justin was very friendly, knowledgeable ~ good support w/ students! They had a great time. Thank you!

Mahalo for your time! Please return this form to: Friends of He'eia State Park, P.O. Box 698 Kane'ohe, HI 96744

**Friends of He'eia State Park Education Program
Evaluation Form**

Teacher Name: Tara Michel Date of Visit: _____

School: St. Andrew's Primary Grade: 5

of Students: 33 # of Adults (Teachers & Chaperones): 6

	Yes	Somewhat	No	Undecided
1. I received the Teacher Confirmation Packet:	<input checked="" type="checkbox"/>	_____	_____	_____
2. I was able to use preparation materials sent:	<input checked="" type="checkbox"/>	_____	_____	_____
3. I can continue to use information presented:	<input checked="" type="checkbox"/>	_____	_____	_____
4. Curriculum was appropriate for age level:	<input checked="" type="checkbox"/>	_____	_____	_____
5. Instructor made it easy to ask questions:	<input checked="" type="checkbox"/>	_____	_____	_____
6. I understood the concepts presented:	<input checked="" type="checkbox"/>	_____	_____	_____
7. My students understood the concepts:	<input checked="" type="checkbox"/>	_____	_____	_____

	Very Good	Good	Average	Poor
9. Convenience of program schedule (Prefer a Tues./Thurs. schedule? _____)	<input checked="" type="checkbox"/>	_____	_____	_____
10. Facilities	<input checked="" type="checkbox"/>	_____	_____	_____
11. Day's activity schedule	<input checked="" type="checkbox"/>	_____	_____	_____
12. Preparation of instructor(s)	<input checked="" type="checkbox"/>	_____	_____	_____

13. I chose Friends of He'eia's Education Program because been here - know it's good!

14. What did you most enjoy about this class? hard trip scuba - all!

15. How could the class be improved? >

16. What other topics or activities would you like to see offered in the future? _____

17. Other comments (please feel free to use the back of this form for more space):

Mahalo for your time! Please return this form to: Friends of He'eia State Park, P.O.
Box 698 Kane'ohe, HI 96744

**Friends of He'eia State Park Education Program
Evaluation Form**

Teacher Name: MERLE MADEIKAWA Date of Visit: 3/21/2003
 School: KIDZ KARE Grade: K-6
 # of Students: 39 # of Adults (Teachers & Chaperones): 4

	Yes	Somewhat	No	Undecided
1. I received the Teacher Confirmation Packet:	<u>X</u>	_____	_____	_____
2. I was able to use preparation materials sent:	<u>X</u>	_____	_____	_____
3. I can continue to use information presented:	<u>X</u>	_____	_____	_____
4. Curriculum was appropriate for age level:	<u>X</u>	_____	_____	_____
5. Instructor made it easy to ask questions:	<u>X</u>	_____	_____	_____
6. I understood the concepts presented:	<u>X</u>	_____	_____	_____
7. My students understood the concepts:	<u>X</u>	_____	_____	_____

	Very Good	Good	Average	Poor
9. Convenience of program schedule (Prefer a Tues./Thurs. schedule?___)	<u>X</u>	_____	_____	_____
10. Facilities	<u>X</u>	_____	_____	_____
11. Day's activity schedule	<u>X</u>	_____	_____	_____
12. Preparation of instructor(s)	<u>X</u>	_____	_____	_____

13. I chose Friends of He'eia's Education Program because WE HEARD
ABOUT THIS THROUGH WORD OF MOUTH

14. What did you most enjoy about this class? CRABBING & EXPLORING
THE FISH POND

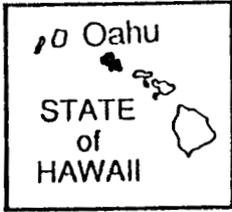
15. How could the class be improved? OVERNIGHT EXPLORATIONS

16. What other topics or activities would you like to see offered in the future?
ANYTHING ... IT WAS GREAT

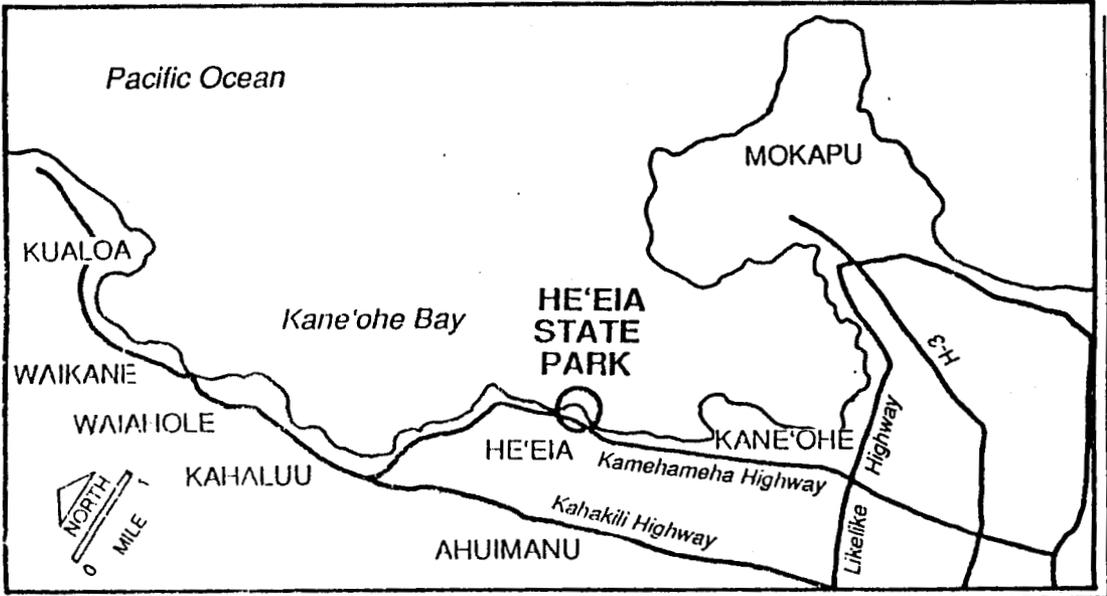
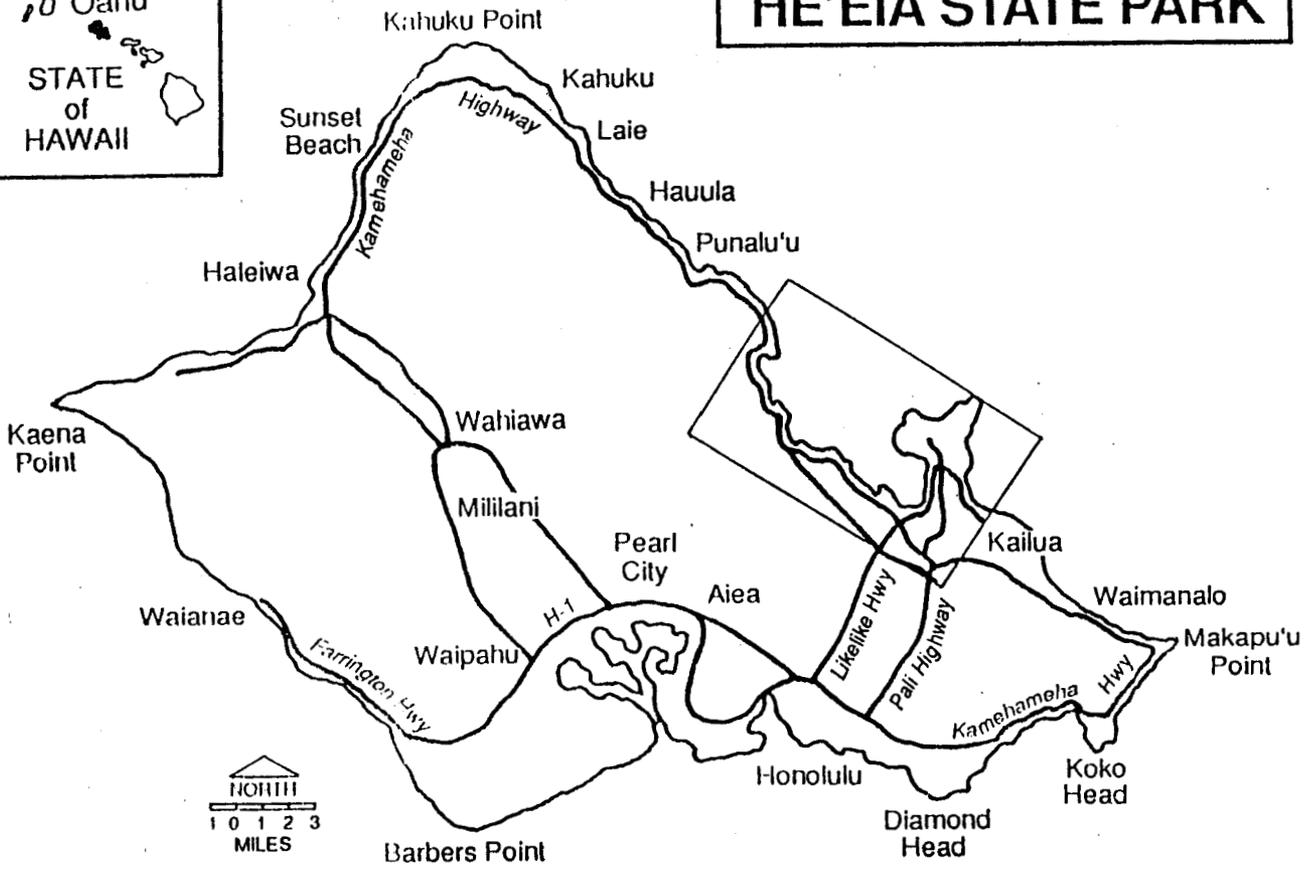
17. Other comments (please feel free to use the back of this form for more space):

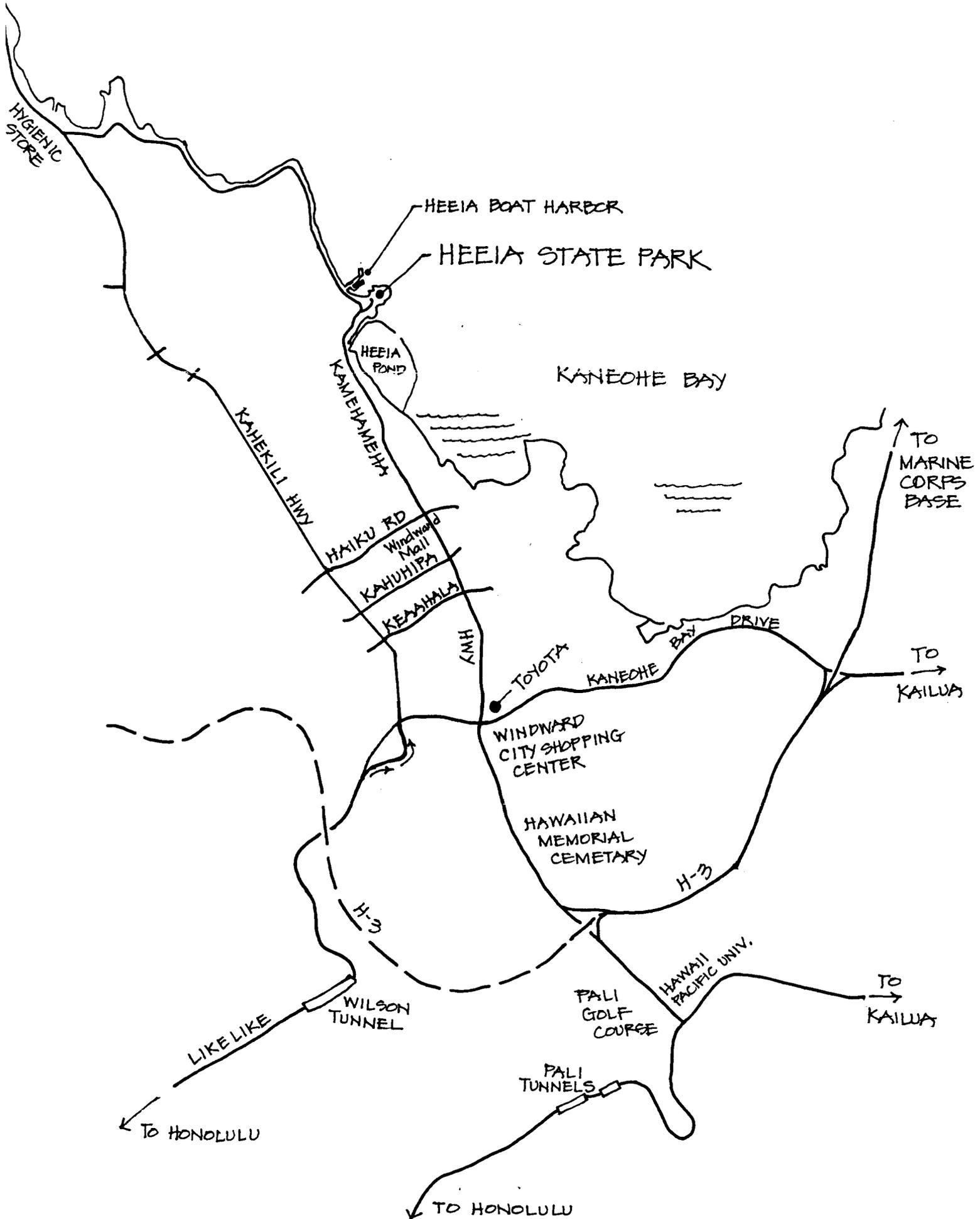
THANK YOU VERY MUCH FOR ALLOWING
US TO COME AND ~~ENJOY~~ FOR PROVIDING
US WITH AN EXPERIENCE WE WILL NEVER FORGET !!! ☺

Mahalo for your time! Please return this form to: Friends of He'eia State Park, P.O.
 Box 698 Kane'ohe, HI 96744

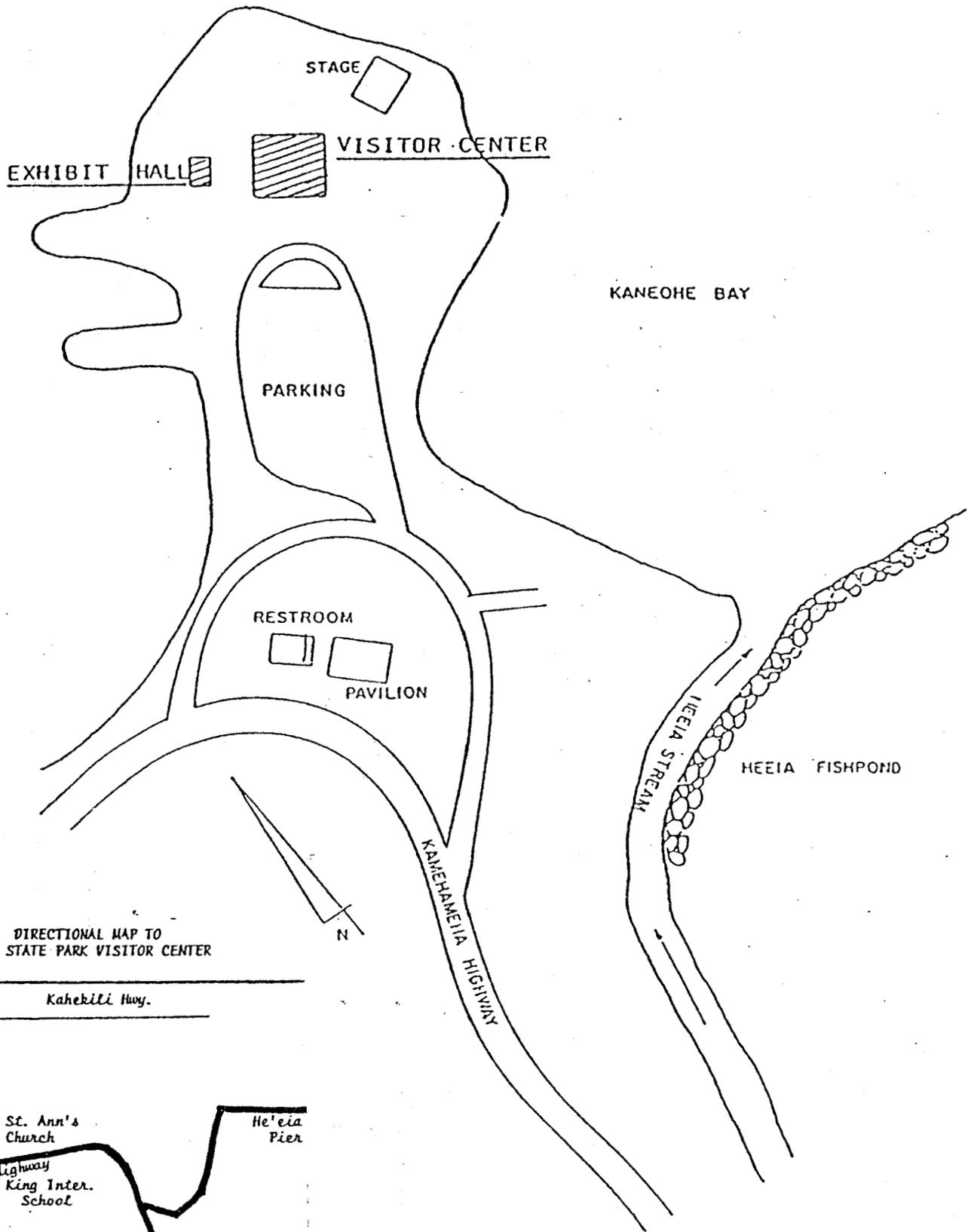


HE'EIA STATE PARK





HEE'IA STATE PARK



DIRECTIONAL MAP TO
HE'EIA STATE PARK VISITOR CENTER

