

Snakes Wanted- Apply at Zoo

BY HERBERT S. LAMPMAN
Wildlife Editor, The Oregonian

PORTLAND'S LONG LOST ZOO is in a fair way to be reclaimed and rebuilt if the city fathers will heed the sensible recommendations of their new zoo director, Arthur M. Greenhall, who took over the position last March. It is apparent that Mr. Greenhall took his time in writing his suggestions for improvement because he didn't overlook anything from guinea pigs to ocelots.

Just in case the city fathers are inclined to pass up Mr. Greenhall's finer points as to improvement it might be well to tell a little about the man's qualifications. First and foremost is the fact that he worked in the New York zoological gardens as assistant to the late Dr. Raymond L. Ditmars and successfully drew a pay check for that stint for 12 years. It follows that the man had to be good to work for Dr. Ditmars that long. His New York boss, the city council may recall, was one of the world's foremost zoologists. No less important than that is the fact that Greenhall is an accredited zoologist and is the man who exhibited, in New York, the first vampire bat ever seen by zoo-hungry throngs in that region.

His suggestions concerning improvements for Portland's zoo are, in the main, quite inexpensive. He suggests that salvaged materials may be employed for most of the work and certain cages could be altered at little expense.

INTEREST:

Tried to Convert Abbe Children

His reasons for such a program are sensible also. He writes in his report, "If the zoo is to be expanded and possibly changed to a new site, then special plans will be forthcoming. I believe, however, that the present building should be improved, the park redressed and everything cleaned up. This activity will undoubtedly stimulate public interest. If this is properly done—the Portland zoo of the future will be a natural outgrowth.

"Perhaps at this time, more than any other, people will congregate at the zoo. They will need diversion and relaxation. The tire shortage and impending gasoline rationing will keep them in the city. They will use city parks more than ever before. For these reasons the zoo should be made as attractive as possible."

The essential changes outlined are comparatively simple. They consist chiefly of in-

stalling a ventilating system in the zoo house, supplying a live steam device to disinfect cages, building platforms for the big cats and painting suitable backgrounds for the cages. The prairie dogs would be moved outside where they could be seen along with the badgers and other small mammals. The keeper's quarters are to be renovated so that he won't have to dwell and sleep alongside the lion's horse meat in the basement.

REPTILES:

Neglected, Greenhall Notes in His Report

One of the best recommendations of the list is the proposal (and here's the fine hand of Dr. Ditmars appearing) is the installation of an exhibit of Oregon reptiles and amphibians. Greenhall's statements about this aspect of a zoo certainly were born of his association with Dr. Ditmars, who was said to be the world's foremost authority on western hemispheric reptiles.

He writes: "Every zoo, either large or small, should have a reptile exhibit. In the case of the Portland zoo this division of animal life has been horribly neglected. People know less about reptiles and have more misinformation concerning them than they have about any other animal life. Since the Portland population takes to the out of doors so much, it should be essential that these people have the opportunity to recognize our local fauna and more particularly to be able to distinguish poisonous snakes from innocuous types. There is no worthwhile reptile collection in the entire Pacific northwest and this fact alone is worth the cost of exhibition."

It is true that there is no worthwhile exhibit of reptiles in the northwest. The average person, after a little study, can recognize a garter snake and the same person, confronted with a larger but equally harmless gopher snake, is terror stricken. It is a rattlesnake and no amount of argument will dissuade them. True it had no rattles on its tail when first observed but five minutes and an active imagination can grow rattles on a Tillamook slug. That same average person, employing a little reflection, knows that Oregon's only venomous reptile is the Pacific rattlesnake.

Mr. Greenhall's recommendations—and particularly the one about an exhibit of Oregon reptiles and amphibians—is worthy of more than considerable study by the city council.



Arthur M. Greenhall, new director of the Portland zoo, was formerly assistant to the famed expert on reptiles, Dr. Raymond L. Ditmars, and believes the Portland zoo should have more of the cold-blooded creatures. He is shown above holding a Gila monster, one of the zoo's few reptilian exhibits.

May 28, 1942

Mr. Emil G. Tschanz
2914 N. E. 50th Avenue
Portland, Oregon

Dear Mr. Tschanz:

Your letter of May 27 just received. I am pleased to have your comments and know of your interest in the zoo. I must admit that our Portland city zoo is not very extensive. It does, however, contain some very interesting exhibits; and since the arrival of Mr. Arthur M. Greenhall and his employment by the city as zookeeper, I have had many conferences with him to the extent that I believe that he has the knowledge, skill and enthusiasm that will prove successful in building up a first-class zoo.

Mr. Greenhall is a young man, but with a very wide experience; and with the training by Dr. Ditmars, -- received under the direct supervision of this late, estimable gentleman -- I can foresee that Portland may look forward to a zoo of no mean proportions.

Our handicaps now are vital. Mr. Greenhall is standing by at present awaiting his call into the armed forces of the country; and it seems ill-advised at this time to appropriate tax money for zoo purposes. I am rather impatient to get started on an entirely new program; but due to circumstances of war, we are going to have to wait until a more propitious time to start a real expansion and the building of a real zoo.

Again I wish to thank you for your interest.

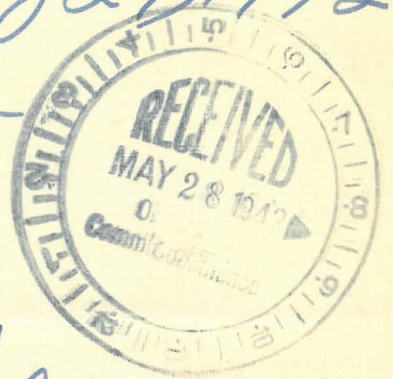
Very truly yours,

COMMISSIONER OF FINANCE

P. L.

EMIL G. TSCHANZ
2914 N. E. 50 AVE.
PORTLAND, - OREGON

May 27, 1942



1-
Commissioner
in charge of
City Zoo
City Hall S.W. 1220 5th Ave
Portland, Ore.

Dear Commissioner!

I wish to
second the plea voiced in this
article by Mr. Herbert Sampman
in the Sunday Oregonian of May
24th, 1942.

I believe that the city zoo
can stand a lot of improvement.
Compared with the Seattle zoo
Portland's zoo looks like a run
down, unimproved half-
abandoned barn yard. Seattle
has a nice snake collection -
kangaroos - camel - Elephant -
lots of deer and other mammals -
the zoo never smells.

Thousands of people yearly
visit Portland's zoo despite its
smells and unhealthy appearance.



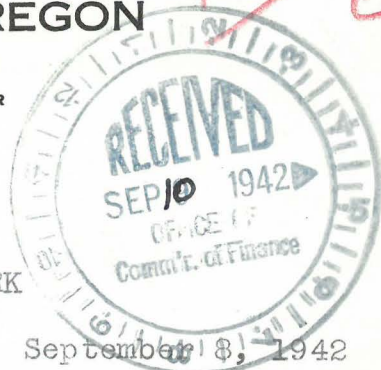
C. P. KEYSER
SUPERINTENDENT

CITY OF PORTLAND, OREGON

DEPARTMENT OF FINANCE
KENNETH L. COOPER, COMMISSIONER

BUREAU OF PARKS
314 CITY HALL

PORTLAND ZOOLOGICAL PARK



September 8, 1942

Honorable Kenneth L. Cooper
Commissioner of Finance
City Hall
Portland, Oregon.

Dear Commissioner Cooper:

At your request I am sending you this memorandum concerning zoo emergency measures discussed in today's talks.

1. Ventilation. It is my opinion that the zoo building should be properly ventilated. During the summer months when the doors are kept open this problem is not so serious. However, the air is actually foul when the doors are kept closed for any length of time. Obviously the doors must be kept closed on cold and rainy days and during the night. This bad air can do the animal's no good and more than likely is causing them a great deal of harm. Secondly, it causes the visitors to make unfavorable comments. There is at present only one animal building accessible to the public and this should be kept as clean smelling as possible from an esthetic as well as from a sanitary viewpoint. A clean smelling building will do much to help us with our zoo improvement campaign. Our purpose is to intrigue visitors so that they will visit the zoo. They should not be greeted with an odor strong enough to knock them over.

SC
I would suggest that at least four to six blowers of a fan type be installed. These fans are used in restaurants. I understand that there is a small fan available at Montgomery-Wards that pulls out 500 cubic feet of air a minute. I understand that it sells for less than \$10.

Commissioner Peterson suggested the installation of an "Ozone Machine" but I am not well acquainted with its good points.

Ventilation is a MUST!

2. Protective fences. Since I have assumed the directorship of the zoo about ten children have been bitten and clawed, one seriously, by our animals. It is true that we have railings and KEEP OUT signs but children either too young to read or just because it

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is possible to go underneath the railings do so. In order to protect these youngsters, and the city (from a legal action), I suggest that immediate measures be taken to remedy this most dangerous situation. Our present railings are inadequate in that they are not high enough and are set too close to the cages. It is very easy for the average adult to climb over or under them and it is just an arm's reach from the railing to the cage proper. Many of our cages have no protective railings whatsoever.

All the KEEP OUT signs in the world, or even one placed in front of every cage, would ^{not} remedy this problem.

JK
C
I would suggest the following strictly temporary measures: That a temporary netting be placed between the upper and lower railings to screen off our pipe fences. This to be done both inside and outside the main building. I recommend that 630 feet of wire netting three feet wide be secured. This netting should be as heavy as possible but fish-net netting would suffice as the most temporary of measures. Whatever is done will be better than the present situation.

I would further suggest that our railings be built up at least one foot higher than they are at present to keep the public from climbing over the railing tops. This may be done by attaching angle irons on every railing post, one foot high. These foot high extensions could then be joined by painted boards or strung with several rows of wire.

- Do not have C
3. Live steam gun. It is impossible to properly disinfect our cages at the present time. It is my opinion that the steam gun would reach into the cracks and crannies that our present cleaning fluids cannot reach. The walls of our cat cages have been baptized with urine since they were last painted. It is impossible to reach these areas without the use of a steam gun. The use of such an instrument would make the cages more sanitary and habitable for the animals. It would tend to sweeten the odor of the building.

Obviously this bit of equipment should eventually be available for the zoo's use every day, but in the meantime I would suggest the use of the city's steam gun as often as possible--at least once a week.

- JK
C
4. Sunlamp. Since there is a lack of sunlight in our building, a large sunlamp that moves on wheels would be a much needed investment and should be used daily during the winter months. This lamp could also be used for irradiating foods before feeding. Animals do not need to have their eyes protected.

I would suggest a second hand lamp be secured. A mercury lamp is easier to use, but a carbon arc would also serve. I understand that many of Portland's street lights are carbon arc lamps. One of these rigged up on a small movable cart might work.

This is one of the most important improvements I could suggest.

Respectfully yours,

Arthur M. Greenhall
Arthur M. Greenhall, Director.

REPORT ON PRESENT STATE
AND
RECOMMENDATIONS
FOR CHANGES IN THE
PORTLAND ZOO
LOCATED IN WASHINGTON PARK

Respectfully submitted by:

Arthur M. Greenhall, Director

Portland, Oregon.

March 28, 1942.

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It is with deep appreciation
that I acknowledge the sketches
that were so painstakingly
done by my wife:

ELIZABETH RUSK GREENHALL

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This report is submitted with the present emergency in mind. Improvements can be made by using, if necessary, second-hand and salvaged materials. Some of the improvements require but little construction--mainly tearing down and refinishing. Other exhibits have been designed for animals that require little housing, feed and care--specifically the reptiles and amphibians which heretofore have been neglected almost entirely. Further recommendations with educational, specific problems and public relationships.

It must be made clear from the start that these suggestions are made for the Portland Zoo as it exists today in its present location. Present installations and a few new improvements are discussed.

If the zoo is to be expanded and possibly changed to a new site, then special plans and recommendations will be forthcoming. I believe however, that the present building should be improved, the park redressed and everything cleaned up. This activity will undoubtedly stimulate public interest. If this is properly done--the Portland Zoo of the future will be a natural outgrowth.

Perhaps at this time, more than any other people will congregate at the zoo for the following reasons:

1. People will need diversion and relaxation.
2. The tire shortage and gas rationing will keep people in town.
3. They will use the city parks more than ever before.
4. It is imperative to keep the young people of the city mentally and emotionally happy.
5. Primarily for these reasons, the zoo should be made as attractive as possible.

Finally, the equipment asked for is essential and should be immediately secured. When these suggestions are put into effect,

including the formation of a zoological society, I feel confident that the zoo can be transformed into an attractive and integral part of Portland's recreational and educational system. The zoo is now scenically located--the installations and program should be made to complete this picture so that the park can become a source of civic pride.

The Main Building

First impressions are generally lasting. The setting of the main animal building is beautiful. From it the observer is treated to a magnificent view of Portland. It is indeed unfortunate that the construction of the building is such, that as a trained zoo man, I must say that it is wholly inadequate for its purpose. It is my opinion that buildings for mammals and birds should be built in such a way that sufficient sunlight is always available to all enclosures. Proper ventilation must be provided for. There should be ample working space and safety devices to assist and protect the people working with the animals. Storage space should be more than ample. I would suggest that in the future, all costly construction should not be attempted until expert advice, from those who know the needs of animals and zoo requirements, is secured. It would save money in the long run and suggestions, such as those that follow, would not be necessary.

I shall discuss the building in four parts: I-The Inside, II-The Outside, III-Basement and Foyers, IV-Equipment Needed.

I. Inside of Main Building

A. Ventilation, in my opinion is one of the major problems.

The air is actually foul at times--particularly when the doors are kept closed for any length of time--which they must be on cold and inclement days and during the night. During the summer months, I understand, air is better circulated because the doors may be kept open during visitor's hours. Still the building must be locked at night and then in the morning during the warm weather the odor is overwhelming. This bad air can do the animals no good and more than likely is causing them a great deal

of harm. Secondly, it causes the visitors to make unfavorable comments, and--there is good reason to.

There is at present only one animal building accessible to visitor's and this should be kept as clean smelling as possible from an esthetic as well as from a sanitary viewpoint.

It must be remembered that the odor is that of stale air and not that of the so-called "animal smell". The stale air is actually so powerful at times (particularly near the parrot cage) that it is virtually impossible to distinguish the natural aroma of any one animal.

In addition, this stale air smell penetrates to the basement, where there is also inadequate ventilation, making the keeper's quarters and dry feed room unsavory. The keepers have commented about this and conditions should be improved for healthful working conditions. Briefly, proper ventilation is important for the welfare of the animals and to protect the sensitive noses of the visiting public.

Recommendations

1. Secure the services of a ventilation engineer for expert advice.
2. My personal opinion is that blowers of a fan type used to ventilate restaurant kitchens, properly placed would suck the foul air out of the building and blow it to the outside. I would suggest that four to six of these be installed and I think that they may be secured from a second hand restaurant supply company. They could be installed in the

upper windows, two on each side of the building and one at each end.

3. The least that should be done is to get some powerful rotating electric fans that would keep the air from settling in any one spot. In the long run, the blowers might prove to be cheaper if the building is to be kept permanently.

B. Paint for Interior of Cages

When exhibiting animals, it is important that they should be attractively displayed so that they may be seen easily by the visitors. Further, neatly painted cages add to the welfare of the animals and tend to remove the jail block appearance of the average zoo. All the cages should be rejuvenated.

Recommendations

The interior of the cages should be painted with some weatherproof paint to suggest land (tan, similiar to the color of cedar shavings) and sky (light blue-green). The edge where the two colors meet should be uneven to suggest a horizon line. The reasons for these suggestions are:

1. Tan and blue-green would make each cage look larger.

Tan, same as the floor color would make the floor seem to go out further.

Blue-green on the wall would tend to make the cage look larger.

2. Blue or blue-green will reflect light without too much glare. Tan is easy on the animal's eyes.
3. The exhibit would be more interesting to look at as the animal would show to a greater advantage.

4. The spectator will not notice the bars or screening so much if there are definite colors to show up behind the animals.

C. Bars and Screening

At the present time the bars and screening are painted either with aluminum paint or dark paint. The bars and screening could be made less conspicuous if painted with any dark neutral color, such as dark grey or black. It must have a dull, flat finish so as not to catch and reflect any light.

Plain black is much better than aluminum as may be seen by comparing the visibility in the parrot cage, where the sides are painted dark, whereas the front bars are painted with aluminum.

D. Further Recommendations for Cage Interiors.

1. All cages housing the large cats should have the platforms raised several feet from the floor bottoms.
 - a. Cats like to ~~sleep~~ and rest off the ground.
 - b. Dampness is extremely bad for all felines.
 - c. The platforms will provide for additional exercise as the cat must jump to reach the shelf.
 - d. Platforms will provide better visibility for visitors.
2. I recommend that tree stumps be placed in the cages, particularly for the cats.
 - a. Cats need something to scratch on. If stumps are not available they will claw their platforms which must then be replaced frequently.
 - b. It will provide a place for the animal to sit and feel more at home.

- c. These stumps against the painted backgrounds I have suggested would make the enclosure appear to be a scene or a place--rather than a mere cage.
3. Rolling objects should be place in the cages so that the animals may have something to play with at times and keep them from sulking. Swings and ropes are included in this category. (I have started to remedy this situation.)
 4. If young lion (next to baboon) is to remain in that cage, this cage should be equipped with a steel trap door to protect the keepers who must clean the cage. The lion is constantly growing and the present wooden trap door presents a hazard.
 5. Floor shavings. It is my opinion that the ~~C~~edar shavings are causing much of the odor in the building. The odor of cedar shavings in itself is pleasing enough as it is often used as an insect repellent. However, when feces and urine mixes with it--the combination is unsavory. I would recommend the use of some odorless wood shavings or substitute "bagasse" which is the remains of crushed sugar cane. (Refer to the New York Zoological Park). This substitute may not be available in Portland. Straw is not advised.

E. North End of Building

This is the part of the building that now houses a wallaby, two porcupines and a civet.

1. It is the poorest construct part of the building so far as exhibiting animals is concerned.

2. It is the dampest part of the building.
3. Sunlight never enters this section.
4. Extremely poor visibility from public's standpoint.
5. This section is almost useless in its present state and practically a total loss.
6. The quarters are so inhospitable that the present animals generally stay in a small portion of the cage even though they have a large space to roam in. This is generally a bad sign.

Recommendations - SEE SKETCHES -

With few changes this section could be utilized for wading birds that require little sunlight and are used to the cold and dampness. Such birds as ducks, geese, storks, cranes, pelicans, etc. would tend to brighten up this part of the building. Furthermore the collection at present lacks these types of animals and it would tend to round out the exhibits.

1. Arches cut into the two central walls could make one large good cage out of the three unsatisfactory ones.
2. The cage floors are suitable in their present state-- so that with a slight alteration a wading pool may be constructed either in the center or at either or both of the two ends.
3. The water faucets could be made into fountains by turning them upward.
4. The inside bars could be removed and used somewhere else in the park or donated to the interests of national defense.
5. Plate glass windows should be installed, at least for the lower panels. They should be in three panes, the

center one to be on a pivot and used as a keeper's entrance and exit. Also to be used to place the birds in the cage.

In lieu of plate glass, the present set up could be retained temporarily. The disadvantages are that the glass may not be strong enough to withstand the impact of a bird that might come up against it. Secondly, the wooden panels cut down the visibility and the smaller panes are harder to keep clean.

Note. The plate glass is only suggested for the lower tier of glass. There are two additional tiers above. Would need nine panes of glass, three of which to be doors, although two doors could be used.

6. Ducks from the city lakes may be used.

If this recommendation is heeded, the result would be the reclamation of a poor present exhibit, better visibility, and an interesting display of local wild fowl--none of which are at present represented in our zoo. We are striving for a well balanced collection.

F. Reptile and Amphibian Exhibit

Every zoo either large or small should have a reptile exhibit. In the case of the Portland Zoo there are a great many reasons why such a collection should be included at the present time.

1. This division of animal life has been horribly neglected.
2. People know less about reptiles and have more miss-information concerning them than any other animal group.
3. Since the Portland population takes to the out of doors so much--it should be essential that these people have

the opportunity of recognizing our local fauna--particularly to be able to distinguish poisonous snakes from innocuous types.

4. It is essential that the public be able to secure information regarding the 1st aid treatment for poisonous snake bite.
5. Reptile exhibits are among the most popular in any zoological park and are sure fire in attracting crowds to the zoo.
6. There is no worthwhile reptile collection in the entire Pacific northwest. This alone is worth the cost of exhibition.
7. Reptile exhibits, such as the one contemplated for this park, are relatively inexpensive to construct and still less expensive to maintain.
 - a. It costs little to secure specimens. There are sufficient Oregon animals to make an interesting showing.
 - b. Other U.S. reptiles are easy and inexpensive to obtain.
 - c. Due to the war, zoos must rely on local animals. This is perfect for Portland as practically no reptiles have been shown before.
 - d. Costs little to maintain the collection as most reptiles and amphibians need to be fed only once every ten days to two weeks and at that only a frog, mouse, rat, fish or a few insects and earthworms.
 - e. The Main Building has unused space that could be adapted to the type of cage used to house reptiles.

SEE SKETCHES

Would need, cages, each to be fit with a light, diaramic background, lock, water dish. Also need some fish tanks.

G. Additional Repairs

1. Railing in front of guinea pig cage should be repaired. The telephone used to be here and a section of the railing was removed so that the phone might be used.
2. Present railings allow easy access to the cages by visitors who crawl underneath. (Have placed KEEP OUT signs in various parts of the building to assist keepers in enforcing the regulation.
3. The first cage on the west side of the building (next to the tiger cage) needs to have the door repaired. (Shall have this door replaced and repaired)

With regard to item G. 2. re: railings--

Railings should be constructed to actually keep visitors away from the cages. It is never possible to tell when an animal may turn upon a person no matter how tame the animal may be or has been in the past. Injured persons could bring legal action against the zoo. Adequate railings, such as now exist in the row of outdoor cages protect visitors from animals and animals from the visitors.

II. Outside of Main Building

- A. Paint. Cages should be painted with a weather-proofed paint following much the same design as for the inside cages.
- B. Platforms. All the larger cats should have raised platforms in their cages where necessary.

1. The animals could get the full benefit of essential sunshine.
 2. The platforms would permit the animals to get away from the dampness.
 3. Raised platforms would make the animals more visible to the public.
 4. The wood should be 2" x 12" and as long as necessary.
- C. Drains. The open drains from the lion cage enter the tiger cage. These should be covered to prevent contamination of one animal to another in case of sickness.
- D. Trees, stumps, etc. These platforms and playthings should be placed in the cages where necessary. The stumps in the large cat cages would permit a step from the slippery concrete to the platform.
- E. Fences. These should be so constructed to keep visitors away from cages. (Have placed KEEP OUT signs in various places, but all the signs in the world would still be ignored.
- F. Prairie Dog Exhibit. This should be moved outdoors and be reconstructed to make an interesting display.
- G. North End of Building. Discussed in I. E.

III. Basement and Foyers

- A. Basement (Dry-feed room, keeper's quarters and boiler room)

These rooms are extremely messy and there is no order what-so-ever!

1. Room will be cleaned up.
2. Room will be painted for cleanliness and additional

light.

3. All feed will be placed in metal containers (to keep out rats and mice) and raised on platforms (to keep out dampness in case of flooding).
4. All tools will be arranged and all equipment will be put into a proper place and so labeled.
5. Ventilation is a definite problem.
6. Storage space is extremely limited. The basement should be enlarged.
7. There is need for additional chairs.

B. Foyers

1. Phone should be removed. (This has been done and proper identification signs put up by phone company since my arrival.)
2. An additional phone bell should be installed as the present bell is not loud enough to be heard inside the main building. The telephone was moved to the top of the stairs that lead to the basement and is a definite improvement.
3. Store-rooms and Space. There is a lack of suitable and adequate space for storing bales of hay and straw and cedar shavings.
4. Unused toilets should be removed for additional space.
5. Buzzer System should be installed registering at a central point say in the keeper's quarters or director's office. Such a system, I believe is important in case of emergency. It may be that a keeper or park helper will need assistance. At present there is no way of signalling or summoning help except by yelling. Whistles may be substituted temporarily.

IV. Equipment Needed

A. Sunlamp. Since there is a lack of sunlight, a sunlamp that moves on wheels would be a much needed investment and should be used during the winter months. I feel confident that it would save money in the long run.

1. Would supply much needed sunlight during winter months, and is essential to sun loving animals.
2. Would cut down veterinarian bills and medicinal costs.
3. Used for irradiating foods before feeding. This has been done at the Toledo Zoo with excellent results.
4. It takes the keepers from 10-15 minutes each day to clean the cages of the main building. The sunlamp would be rolled along in front of the cage next to the one being cleaned out. As the keeper leaves the cage, he would set the lamp ahead a cage, so there is little extra work involved.
5. A must! Probably the most important piece of equipment that I could suggest.

B. Live Steam Gun. This is a must for sterilizing cages.

1. Would cut down the cost of chemicals, disinfectants and cleaning fluids.
2. Most chemicals for disinfectants are dangerous to the animals unless thoroughly washed out after using.
3. Easy to use after it is once installed.
4. Insures complete sterilization by entering corners and cracks that are not easily reached by ordinary ~~dis-~~infectants.

5. Can be used on walls and tops of cages.
6. Dries quickly.
7. No odor.

C. Infra-red bulbs. I would suggest that infra-red bulbs be used in place of the ordinary bulbs that are now used to light up the interior of the cages.

1. They have rays beneficial to the animals.
2. Throw as much light as an ordinary bulb of same wattage.
3. Throw off considerable heat.
4. Cost very little more than ordinary bulbs and are more than worth the difference in cost.

D. Fire extinguishers. There are none in the park. I would recommend at least three to be used in case of fire and to be used against fires caused by incendiary bombs.

E. Sand Bags. For use in case of air-raids and to be used in combatting incendiary bombs. Understand that this can be secured from the Fire Department.

F. Nets. There should be at least four good sized nets for use in catching small animals and birds for either shipping animals or transferring them from one cage to another.

G. Metal Vice. The keeper who serves as carpenter has requested that we secure a vice so that minor repairs can be facilitated. There are always many small repairs to be made and too much time is wasted if it is necessary to send out our measurements.

H. Feed Truck. To help keepers carry pails of food. (Secured)

I. Complete First Aid Kit. This is for use in case of emergency to keepers or injured visitors. It should be kept in a special place and conspicuously marked. Reasons for its use are obvious and should include the following items to always be replaced as used.

1. 1" compress on adhesive in individual packages.
2. 2" " " " " " "
3. 4" " " " " " "
4. Sterile gauze squares about 3"x3" in individual packages.
5. Assorted sterile bandage compresses in individual pks.
6. Triangular bandages. (at least 2)
7. Sterile gauze in individual packages about 1 square yard.
8. Picric acid gauze.
9. Burn ointment such as 5% tannic acid jelly.
10. Eye dressings.
11. Iodine (mild) in individual ampoules.
12. Aromatic spirits of ammonia in ampoules.
13. Inelastic tourniquet (with pad).
14. Scissors.
15. 3" splinter forceps.
16. Paper cups.
17. 1" and 2" roller bandage.
18. Wire or thin board splint.
19. Castor oil or mineral oil for use in eyes. Sterile and in small tubes.
20. Stretcher (canvas).
21. First aid book.

J. Wasted Heat in Main Building

During this present emergency it will be increasingly difficult to secure fuel for heating the Main Building. At present most of the heat rises to the central dome thus representing a great^{deal} of wasted warmth. It is recommended that this dome be shut off either temporarily or permanently with some flooring.

I. Suggested Improvements (exclusive of Main Building)

A. Salvage of Old Eagle Aviary -SEE SKETCHES

The concrete base of the old eagle aviary now lies unused. People still go down to look at it as paths lead to and from it.

Recommendations

The remains of this aviary can be made into an interesting, worthwhile and serviceable exhibit of a circular cage type to house small mammals. The job is already half done because of the good concrete base and water connections. It is my suggestion that a circular group of cages, constructed of pipe and heavy wire, be made of it. There would be a small house in the center not over six feet high. It would be large enough to serve as the sleeping quarters and would lead to the outside. It would also house a small oil stove to warm the building during extremely cold winter days. Either six or eight cages would radiate from the central house. Shifting cages should be provided for as well as a keeper's door to the house and doors on each of the cages for cleaning purposes.

Such enclosures could house:

1. Squirrel exhibit with moving wheels and appropriate trees.
2. Skunks, porcupines, badgers, civet cat, or any small mammal.

If the above suggestion is not satisfactory there are two other possibilities:

1. A small circular building to house perching birds.
2. A small circular building to house a reptile collection instead of having the cages in the Mail Building.

B. Guinea Pig "Hotel" - SEE SKETCHES

An inexpensive amusing exhibit can be made by utilizing our always growing collection of guinea pigs. It is my suggestion to build a house about three to three and a half feet long and about two and a half feet to the top of the roof. The roof should be removable so that the keeper can clean out the inside and clean out the little stalls and nest that will be provided for. There should be a lot of windows and doors for the guinea pigs to poke their heads through and to enter the house. These animals also like to use wheels, so I thought of a style whereby the wheel is incorporated into the house--namely that of an old water wheel mill. The whole structure should be gaily painted and named "Old Mill Hotel".

C. Barless Cages - SEE SKETCHES

I am very much in favor of barless enclosures such as has been constructed for the sunbear, for the following reasons:

1. It does away with old style bars and wire.
2. Better for the animals.
3. Easier for the public to see the animals.
4. Easier to clean and care for the animals.
5. More sanitary.
6. Utilizes all available sunlight.
7. Easier to keep in repair.
8. Cheaper to construct in the long run.

My recommendation is to build this type of enclosure or grotto whenever feasible and possible. It is excellent for lions, tigers, bears, etc. Circular enclosures using bricks and concrete may be satisfactorily built for smaller

animals such as foxes, coyotes, bobcats, coatis, ocelots, etc.

It is my opinion that materials for this type of construction are not on the priorities list and therefore may be used at this time.

D. Black and Brown Bear Pit

This pit is satisfactory in many respects. It is large and roomy. The animals seem to do well in it. It is a difficult enclosure to keep clean due to the numerous rocks. It is also suggested that the bars be painted every so often to keep them from rusting. Eventually, I would suggest that these bars be removed and the concrete be built up so as to give the effect of a barless grotto.

E. Grizzly Bear's Cage

These tremendous animals should have larger quarters to show them to their best advantage. A grotto or pit constructed down the road toward the rose gardens would be satisfactory.

F. Small Animal and Bird Cages

I am including the row of outdoor cages and the five square single cages in this discussion. These are, for the most part, makeshift. If they are to be maintained in this manner, I would suggest that all wooden frames be replaced with metal piping. This has been done in several instances. Concrete or even brick corners may be substituted for the ordinary pipes to give the enclosures a more permanent appearance. Eventually the wood will rot due to the dampness. In addi-

many of these animals scrape, scratch and dig--and wood cannot stand this further punishment.

G. Pheasant Runs

At present the pheasants, peafowl, a raven and magpie are in the large flying cage. Pheasants and peafowl would do much better in separate runs. As a matter of fact, the peafowl should be allowed to roam around the park at will. I understand that this is not possible because of the numerous dogs that come into the park. Until such time as it will be possible to fence the entire zoological park or to exclude dogs permanently, it will not be possible release these showy birds. The proposed pheasant runs should be about forty feet long and about ten feet wide. A suggested site for this is next to the sun bear grotto and the last cage of the outdoor row. There is an area 45'x40'. Three partitions of 10' would make four satisfactory runs. Each run should have a hutch or one large hutch with four entrances would do. A family of pheasants, say one male and three or four females would occupy a run of this size. It will eliminate our present trouble of a pugnacious bird constantly tormenting the others. At present a bossy cock silver pheasant makes life miserable for the rest of the inmates.

H. Present Pheasant Cage

When the pheasants and peafowl have been moved to their new quarters, we then may place the raven and magpie in one of the small square cages leaving our flying cage free. In the summertime this cage, cleared of the birds,

could be used for a spectacular monkey exhibit. Our monkeys placed in this enclosure would be able to get the sunshine they so badly need. This would cut down their possibility of contracting TB and thus make them more resistant for their winter without much actual sunshine inside the main building. The daily use of the sun lamp already recommended, I believe, would keep in check the tendency of monkeys to contract TB and colds during the winter months and thus tide them over until the following summer.

Further, this cage, so centrally located could be one of our major attractions or the amusing antics of the simians would undoubtedly be a drawing card for visitors.

I. Prairie Dog Exhibit

A prairie dog exhibit properly constructed can be made interesting and should be in every park. We have two or three "dogs" now but they are seldom seen by the public. As these animals dig down for 15 feet or more--it would be necessary to give them sufficient room to dig about it. There should be some method of insuring adequate drainage and also to secure the enclosure so that the rodents will not dig themselves out.

J. Macaws and Cockatoos

These birds should be placed outside of the Main Building during the warmer months. Suitable stands, higher than the reach of visitors can be constructed. These birds may then show themselves to their best advantage.

K. Owls.

There are at present three Pacific Great Horned Owls in a

square outdoor cage. They sit on a perch high up and are seldom seen by the visitors. I recommended that three or four post about 8" in diameter be placed in the cage. The tops to be not more than eight to ten feet from the ground and flat topped. A perch should be provided on each perch. Next I would suggest that at deep niche some 18" high and as deep and wide as possible be chiseled out. These niches should have a perch at the entrance. I believe that the owls would use these holes and could always be seen to good advantage.

L. Reptile Pit-SEE SKETCHES

This would house local snakes, turtles and lizards during the warmer months. This is a must as it has never before been done in the Portland Zoo. Local reptiles (non-venomous) properly labeled for identification would be an innovation. It should contain a small pond which would serve as a moat and would be used by the turtles and water loving snakes. Low bushes, rocks and stumps should be included to make a suitable background.

Sometimes it might be advisable to change the nature of the pit to add variety. Here is a suggested program for three successive summers:

1. sagebrush and desert scene.
2. swamp scene (possibly of the Southeastern U. S.)
3. local Portland scene.

If this proves popular several pits might be constructed. During the winter months these animals would be housed in our indoor reptile collection. Local animals may be re-

leased if they are too numerous in our collection. I understand that many snakes occur normally in the city parks.

Refer to Page 9 of this report for my reasons in suggesting a reptile exhibit.

M. Baby Pet Zoo

In an earlier part of this report I have recommended suitable fences to protect the public from the animals and the animals from the public. This refers only to the potentially dangerous animals. I believe that visitors and particularly young people should have the unforgettable experience of being able to touch and handle animals. It promotes a love for wild life as well as other reasons that the reader will immediately think of particularly if he or she is a parent.

I would suggest a low fenced in enclosure high enough to keep the animals and small children in, but not too high for a parent to step over to secure the child.

Such a pen would at most be temporary for a few hours each day and should have an attendant in charge. Animals such as tame rabbits, guinea pigs, small lamb, tame duck or goose, turtles, etc. be used for this exhibit.

It is my opinion that this would prove to be a most fascinating display. It should be intended primarily for children, but like electric trains, I imagine that the adults will want to make good use of it.

O. Beaver and Otter Exhibit - *Oregon is known as the Beaver State*

Some provision should be made to have a pond to display these most interesting animals. They are extremely active and would be a source of constant amusement and education.

P. Hoofed Stock Corrals

Mud is the chief problem. It is particularly bad around the various barns and causes the disease of "foot rot" in our collection. I think also, that some of the animals should be segregated. I believe that different types of animals may be kept together, but if possible only those from the same continent be kept together. For example, hoofed stock from North America may be mixed, those from Africa in another enclosure--mixed, etc.

However, you will always find trouble makers that make life miserable for the others. These specimens guilty of such conduct should be removed from the group and segregated.

I also believe that land can become contaminated and overgrazed. Land should be allowed to rest, especially if animals have fed or grazed from it over long periods of time. This is extremely important, particularly if animals have been taken sick on any land. This infected land should be allowed to rest and to give time for the sun, rain, air, etc. to kill off the germs and bacteria that will be found. Just diseased areas, should be plowed and turned under and then if possible reseeded with grass and replanted with trees and shrubs.

1. Black-tailed Deer and Pig Corral

Wild swine and deer should not be kept together. At present the two peccaries and African wart-hog run the deer around the enclosure and snap at their feet. This is definitely bad.

The enclosure itself, I understand, has a bad reputa-

tion for deer--as all previous examples have died in this enclosure. I would suggest that this range be extended to cover the ground between the present range and the bear pits. This would give the deer a chance to get onto new territory. It would let most of the present range rest although the pigs could remain. The black-tailed deer would come down at night to use the same barn. If white-tailed deer (in the large corral) are free from disease, they may be moved into the new enclosure.

2. Buffalo, Elk, Fallow and Sika Deer Range

I would suggest a number of divided ranges so arranged that the animals may be moved from one corral to another. This would permit some of the land to rest each year. Runs should be made so that moving can be facilitated.

There are several possibilities:

- a. There is a proposed road below the iron fence and has been laid out. It cuts the present range into two parts. Our new ranges could be built below the road, so that visitors could have access to both old and new corrals. This does not seem advisable during the war--as the Army has deemed this area restricted as it close to the resavⁱors.
- b. New corrals and enclosures could be built above the finished road along side of the black-tailed deer corral and the motorcycle run. There is a fine hill and valley that is ideal and has never

been used. A run may be built under the road to facilitate moving and also to utilize the present barns.

Further Recommendations.

- a. All muddy sections around the barns and feed racks should be filled in with gravel, concrete or wood.
- b. Our quarantine quarters should be improved for sick animals. These quarters should be made more sanitary and covered with concrete, if possible so that it will be able to wash down and disinfect the quarters. It is impossible to keep down reinfection at the present time.
- c. Our "cattle dip" should be improved so that the treatment of sick animals be facilitated.
- d. Confining runs should be constructed to facilitate the capture of animals to be treated and run through the dip and bath.
- e. The Sika or Japanese Deer should be segregated as they annoy all the other animals.
- f. Buffalo and Yak could be kept together if they are free from TB.
- g. The sheep may be kept together. (Aoudad, Mouflon, and Karakul)
- h. The Fallow Deer from Europe could be kept with the Elk.
- i. Nilgai should be separated or could be kept with any new antelope that might arrive in the future
- j. The wild swine may be kept together.

II. Suggested Improvements (exclusive of animal exhibits)

A. Garbage Disposal & General Clean Up

At the present time garbage is dumped behind the concession stand in full view of the public.

1. It is unsightly.
2. It is unsanitary as it carries odors and is the breeding place for flies and vermin.
3. It is not picked up regularly.
4. It causes derogatory remarks and comments by visitors that are truly warranted but does the reputation of the Zoo, Bureau of Parks and City of Portland no good.

Recommendation

1. To sink a large metal receptacle in the side of a hill close to a road but away from the visitor's sight. If it is to be seen by the visitors it should look serviceable and be kept spotlessly clean.
2. It should have a door so that the garbage and refuse may be easily collected from the bottom. It may be thrown in from the top but should have a cover on it. In this way, if the garbage is not picked up for a day or so, little harm can be done, for at least it will be stored and is as sanitary as possible.
3. If this metal container cannot be constructed at the present time, garbage may be placed in regular garbage cans, but must be regularly collected once every day.

The buildings and grounds should be cleaned up. I have authorized a general clean up and this is well under way.

B. Walks and Drives

1. I would suggest that the walks around the main building

be paved or covered with some other "walk" material so that visitors will not be forced to sink into the soft mud.

2. Would also suggest that the dirt steps made down the hill by the men's side of the rest room be replaced with more permanent steps.
3. Would suggest that all mudholes in front of exhibits, particularly the bear pit and in parking spaces, be filled in course gravel screenings to cut down the mud hazard.
4. Would also suggest that stairs or ramp (or both) be cut into the turf (on the slope) on the North side of the main building. At present visitors walk up this steep side and cut divots in the grass. These steps would cut down the hazard of falling and permit the keepers and Director a direct cut from the office to the telephone.
5. If the small mammal house is to be constructed on the site of the old eagle aviary, then the steps leading to it from the automobile drive should be made more navigable and safer.

C. Icebox, Butcher Shop, & Director's Office

There is a definite lack of storage space at present. We need room to store bales of hay, straw, vegetables, equipment, etc. At the moment the Director is using a damp, poorly lighted, poorly ventilated, inhospitable room in the butcher shop. This room was originally intended for a storage room. If a zoo director is to be maintained, suitable quarters should be established where he may conduct his written work, keep his records, house

the zoo library and meet visitors who come with problems.

D. Signs and Labels - SEE SKETCHES

The most direct way that the public is informed of our collections and activities at the zoo is by the means of labels and signs. At present signs are almost lacking and the labels incomplete and not suitable to our needs.

Signs

1. Most of the entrances to Washington Park are now blocked off. Signs stating definitely that ZOO IS OPEN (and directions for getting there by car or foot) should be posted on all gates. Many of Portland's inhabitants do not know that the zoo is opened. Secondly, so many people in the city are newcomers, that directions should be given to this new faction.
2. Arrow signs should be put up in the zoo proper to indicate the location of all exhibits.
3. A central bulletin board should be constructed and conspicuously placed to contain:
 - a. A simple map of the zoo showing location of all exhibits.
 - b. Bulletins of interest, such as news of the zoo, new arrivals, births, lectures, etc., should be posted.

Labels

Every cage and every exhibit should have an interesting, colorful, non-technical, informative label of a new and novel design. These signs should be neatly painted and made permanent. The signs should be about 11"x14" with

a background of light blue for instance to make the sign conspicuous and colorful. The sign will include the outline of the particular continent that the animal comes from. Each sign will then include:

1. Name of animal
2. Map of continent
3. Sketch of animal for quick identification
4. Interesting information.

The materials needed will be paint materials, proper brushes and the sign itself to be either metal, pressed wood, celotex, plywood, beaverboard--or whatever is available. Metal is best. Services of artist will be needed.

E. Nature Trails

The many trails in and about the Zoo should be utilized for nature trails. Every interesting tree, shrub, flower, rock outcrop, etc., should be indicated by a novel rustic label. Best suggesting is to attach a triangular wooden block attached to a natural post still covered with bark. The block should be attached to the post in such a way that it is moveable and the visitor can read the information on the flat sides of the block.

The trail should not be over a mile long and should finally lead the visitor to the Zoo.

This is an excellent project for the boy scouts or a high school--particularly the latter. The program may be set up as follows for a single school:

1. The carpentry class can make the wooden blocks.

They will also cut the posts. (There are many serviceable broken boughs in Washington Park.)

2. The biology class and the nature clubs can identify the plants and other materials. They will also check on all scientific information for accuracy.
 3. The english and journalism classes can compose the actual wording and captions. They will also check for grammar.
 4. The art classes can paint on the captions or if type is used--the typing classes could do it instead.
- In this way the Zoo and park could tie up with the school program in an active program of participation and at the same time set up a worthwhile and interesting project. I further believe that there will be less vandalism than usual because it will be the handicraft of the children themselves. They are not so apt to mutilate something that they spent a long time in constructing.

F. Zoo Cabin or Trail Museum with Small Animal Hospital

A small rustic cabin should be constructed (of logs?) in the Zoo. This cabin should consist of three rooms.

1. Small Animal Hospital
2. Director's Office
3. Main room for small museum collection; seats (folding) for impromptu talks and lectures.

This building could well become the center of activity of all natural history societies in Portland. Each group represented should have access to a table to place out exhibits of flowers, plants, trees, rocks, insect collection, bird charts, etc. These tables should be located on the sides of the room leaving the center free to set up the chairs to seat people desiring to hear talks and discussions.

The Director's Office may be located in this building so as to direct all activities.

The Small Animal Hospital, closed to the public, may also be housed here for at the same time it can be under the immediate supervision of the Director.

G. Veterinarian Service and Hospital

The present practice is to secure the services of a veterinarian whenever necessary. At the moment the collection is too small to warrant full time services of a D.V.M.

Recommendation

It is suggested that a retainer fee be paid to some efficient veterinarian. His duty would be to look over the collection at regular intervals and maintain a program of preventive medicine. Further it would be his duty to keep the collection in as good health as possible and to recommend diets, feeding schedules, etc. He would receive no pay except his retainer fee which should be adequate to sustain interest--still not as large as a salary. If he is a good man, his preventive suggestions will cut down mortality and ^hus less need for his services. The zoo should pay for all necessary medicines. He need visit the zoo only once a week.

The present size of the zoo is too small for a hospital of any size, but there should be, as soon as possible, a small building, or separate room as suggested in part F. a few paragraphs above. At any rate there should be some section in the zoo segregated from the rest of the collection to house and quarantine animals with temporary ailments so that they may be treated and thus not spread any infection. Newcomers would be placed in quarantine.

It is my opinion that sick, maimed or lame animals should be removed from the public's gaze. On the other hand, their ailments may be only temporary and every effort should be made to make the patient feel as comfortable as possible.

H. Keeper's Situation

At present the zoo has a staff drawn upon from the Park Department. It is difficult to get men that know animals. It takes some time to break in a competent animal keeper. Further, it requires a special type of ability, clear thinking and a kind disposition to properly handle dangerous animals. Almost any sort of position can be perilous. One takes his life in his hands whenever he crosses the street. It is not anyone who can handle animals as it is not merely a question of cleaning out a cage. If the Zoo is to make any sort of a showing, a good keeper must be proud of his work. It is a sort of distinction acquired by few. For the most part our men are good. Just as soon as we really find a good one an order comes through for his withdrawal at a moments notice in order to handle some other position.

Recommendation

It is suggested that a special position or positions be formed for zoo jobs. These men should receive pay commensurate with the new position in light of the hazards involved. In other words they should a special title and pay to match. Such titles could be: Head Keeper, First Keeper, Second Keeper, Zoo Chef, etc. When the Zoo assumes greater proportions they should have a special uniform. At present they should have

some article of clothing to set them aside from the public for quick identification. The public should be able to distinguish the keepers at a glance. I would suggest that the men wear a cap such as is worn by the military, preferably green or black. It should also carry a badge designating the title of the individual. This badge too, would give the man the necessary authority to enforce a number of park regulations.

I believe further that the zoo men should strive to attain a standard of personal neatness. Even though a person may be working with materials that cause smears of dirt--the individual himself can still retain a quality of cleanliness.

To attain all of this--the men should feel that it is an honor to work in the Portland Zoological Park. The pay and titles should click to the extent that it should be extremely easy to pick the type of person to fill any particular job. All of this is essential to the efficient running of a first rate zoological park.

I. Public Relationships

Publicity can make or break any public institution and zoos are no exception to this rule. Heretofore, most of the publicity for the park has been through the medium of the newspapers. This is excellent and should be maintained and encouraged. Two other phases, I believe have been neglected. The park should be brought to the public's attention by as many ways as possible

Recommendation

1. The present director will attempt to give talks at

the park whenever there are sufficient people to warrant such a procedure. This would probably be on Saturday and Sundays. These talks would be on a variety of subjects to be posted on the Park's Bulletin Board. It is hoped that these discussions will help the public to better realize the advantages of their Zoo.

A public address system is highly suggested for this!

2. The present director will attempt to inaugurate a weekly radio program to consist at first, primarily of questions and answers to stimulate the listener's interest. Later more complex programs may be developed.
3. It is recommended that the public school~~x~~ teachers be acquainted with the possibilities as offered by a progressive zoological park. The present director will attempt to inaugurate some connection between the public schools, secondary schools, colleges and the zoo.
4. The zoo should attempt to attract such organizations as the Boy Scouts, Audubon Society, Isaac Walton League, Natural History and Zoological Societies.
5. The present director will do all in his power to maintain cordial newspaper relationships.

J. Formation of a Portland Zoological Society

There is no zoological society active in the zoo's affair at the moment. I think that one solution of the Zoo's problems would be the formation of a live wire zoological society. The governing board of which to be made up

of a dozen or so of Portland's substantial citizens. The society itself should consist of all interested parties willing to cooperate, to uphold the platform or ideals of the organization and to faithfully contribute their annual dues. A junior zoological society should also be formed to be made up of interested children and youths, with their separate charter and annual dues.

This society can, in cooperation with the City of Portland, take an active interest in the park, help formulate its policies, its recreational and educational programs, build up the zoo's collections, buildings, equipment, staff, etc. It should attempt to foster the study of zoology and natural history. Furthermore, it must have a platform of recreation, education and conservation, based on Democratic Ideals.

Benefits of membership would include annual meetings, picnics, lectures by the staff, and by prominent outside speakers, publications if any and the support of the society's platforms and ideals.

The society may subscribe to various events such as, photographic and essay contests, animal naming contests, expeditions, new exhibits, etc. In the case of contests, defense bonds, cash prizes, or books, etc., may be offered. The Portland Zoo needs the active support of an interested group of public spirited and minded citizens to give the necessary incentive, push, dignity and civic pride. If such a group can be formed--they will want to build up the zoo, they will have to interest the people of Portland and have a properly run park to carry the name of the society.

CITY OF PORTLAND
INTER-OFFICE CORRESPONDENCE
(NOT FOR MAILING)

October 8, 1943

✓

From Dept. of Portland Zoological Park
To Dept. of Bureau of Parks
Addressed to Mr. C. P. Keyser, Supt.
Subject Retention of the grave-yard watch at the zoo.

Dear Mr. Keyser:

I wish to suggest that the grave-yard watch at the Portland Zoological Park be permanently retained for the following reasons:-

1. It is cheap insurance to have a collection of potentially dangerous animals under constant surveillance at all times in order to safeguard the citizens of Portland.
2. All of our cats must be regarded as dangerous at all times--particularly at night. As you know, members of the cat family are primarily nocturnal and are most active during the hours of darkness. They must be watched continuously in order to know that they are securely caged.
3. Our large cat cages, lions and tigers, as well as some of the other cages cannot be regarded as safe. A watchman should be on hand for any eventuality in order to give the alarm to the police or notify the zoo director. As you know our lions and tigers are caged in enclosures having only "monkey mesh" for protection! These cages are in need of repair or reinforcement.
4. Most vandalism has occurred at night and we have had several attempts. This attempts, you will recall, were made when we did not have a watchman on duty. The attempts probably would not have been made if we had a man patrolling the area.
5. In the last two years our animal collection has increased in value and represents money to the City. A watchman should be on hand to protect that investment. Buildings, grounds and equipment also represent a sizable investment and should deserve protection.
6. During the winter months a watchman should be on hand to see to it that our water pipes are kept from freezing.
7. A man should be on duty during the winter to keep the snow off our cages to prevent their collapse. He must also see that falling tree limbs do not pierce any cage and liberate the animals.

P-1 F

Mr. C. P. Keyser - 10/8/43

8. During the summer months a watchman should be on hand to report fires. We had one during the past summer which could have spread to the West Side hills and caused untold damage if it had not been reported and checked.
9. Past and present watchman have reported "late visitors" to the zoo. These people have been told to leave. There is no ascertaining what these people would have done if they had not been found. Any person who visits the zoo after 11P.M. must have some reason for doing so--obviously it is not to look at the animals. Drunks have been found at the zoo at late hours. These people should not be allowed free run of the zoo in an intoxicated condition. Stolen cars have been left abandoned at the zoo on various occasions.
10. On numerous occasions it has been necessary to give special attention to our animals late at night. Sick and baby animals must be tended to approximately every two hours. Baby animals must be fed after 11P.M. For example, our baby polar bear valued at \$800.00 must be fed after midnight.
11. A person must be on duty at all times to notify the director in case of any emergency.
12. The police do not patrol the upper part of the zoo at night.
13. All of the above reasons are in addition to war time hazards such as air-raids or sabotage intended to cause hysteria and confusion.
14. If cost is a consideration, a special position of watchman would be set up with a watchman's pay involved.
15. A man charged with the responsibility of watchman's duties serves as a protection to the City government as well as to the slumbering public. In this way, the Bureau of Parks, or the City could not be charged or accused of negligence for taking the proper safety precautions for any occurrence.
16. If the late watchman shift is done away with--I refuse to assume the responsibility for anything that happens at the zoo during the hours normally patrolled and protected by the grave yard shift.

I sincerely hope that this most important shift be retained.

Respectfully yours,

Arthur M. Greenhall
Arthur M. Greenhall, Director

cc to Hon. Kenneth L. Cooper, Commissioner of Finance

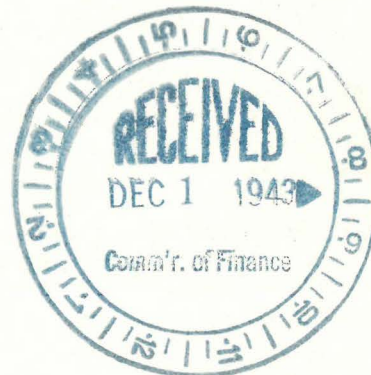
The Government Purchasing Commission of the Soviet Union in the U.S.A.

REPRESENTATIVE IN PORTLAND, OREGON

233 S. W. SIXTH AVENUE
PORTLAND, OREGON

November 30, 1943

TELEPHONE ATWATER 9192



Mr. Kenneth L. Cooper
Commissioner
Department of Finance
City of Portland
City

Dear Sir:

Thank you for your kind letter concerning the pets contributed by Russian Seamen. We are glad to learn that a greatly increased interest has been created in your zoo.

Russian Captains and Seamen find it no hardship to bring such pets to the people of Portland, and they will be highly pleased to know that they have contributed to the pleasure and education of Americans in this locality.

Sincerely yours,

T. I. Kalinin
Vice-Representative

THE GOVT. PURCH. COMM. OF THE
SOVIET UNION IN THE U. S. A.

TIK:ec

P-16



C. P. KEYSER
SUPERINTENDENT

CITY OF PORTLAND, OREGON

DEPARTMENT OF FINANCE
KENNETH L. COOPER, COMMISSIONER

BUREAU OF PARKS
314 CITY HALL

PORTLAND ZOOLOGICAL PARK
314 City Hall
Portland 4, Oregon



Nov. 25, 1943

Hon. Kenneth L. Cooper, Commissioner
Department of Finance
City Hall
Portland 4, Oregon

Dear Commissioner Cooper:

You may be interested to know that we have received a number of valuable additions to our zoological collections from the crews of various Soviet vessels that have arrived in Portland.

Specifically we have the following gifts:-

- 1 Sea Eagle
- 1 Kamchatka Brown Bear
- 1 Himalayan Black Bear
- 1 Polar Bear
- 1 Snowy Owl

I have estimated this collection to be worth approximately \$1500.

I feel that the City of Portland, by accepting these animals as gifts, has done much to strengthen locally, mutual and friendly relations between the two governments.

A great many Soviet sailors have visited the zoo and were greatly interested and pleased when they saw the various animals which had been donated by their fellows.

You will recall the one incident of the woman member of a Russian ship's crew who visited "Mischa" the Brown Bear she had brought over from Siberia. This visit resulted in nationwide publicity for the Portland Zoological Park since the incident had been pictorially recorded for a national magazine.

It would have been impossible for us to obtain these fine animals if it had not been for the Soviet Government Purchasing Commission that interceded on our behalf.

November 26, 1943

Soviet Government Purchasing
Commission
603 S. W. Oak Street
Portland 5, Oregon

Gentlemen:

Attention: Mrs. N. M. Osipovitch

During the past few months the City of Portland has received gratis several very valuable specimens for our zoo; viz:, one each of the following:

Sea Eagle
Kamchatka Brown Bear
Himalayan Black Bear
Polar Bear
Snowy Owl

These specimens have resulted in greatly increased interest in our zoo. Besides, their value being considerable and no funds having been provided in the budget for additional animals, these donations are particularly fortunate.

Your citizens have strengthened considerably the fast-growing amicable relations between our local citizens and your people. I take this opportunity to offer the gratitude of the people of Portland to those of your people who have so generously given their pets for our pleasure and education.

Sincerely yours,

COMMISSIONER OF FINANCE

cc:
Arthur M. Greenhall

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CITY OF PORTLAND
INTER-OFFICE CORRESPONDENCE
(NOT FOR MAILING)

May 20, 1943



From Dept. of Portland Zoological Park

To Dept. of Department of Finance

Addressed to Commissioner Kenneth L. Cooper

Subject Report of Arthur M. Greenhall, Director of the Portland Zoo, regarding his trip to inspect the San Francisco Zoo and conference with the officials of the 9th Civilian Defense Region.

Dear Commissioner Cooper:

As authorized by City Ordinance No. 78705, I wish to submit a report of my trip to San Francisco, California during May 10 to May 17, 1943.

I arrived at the San Francisco Zoological Gardens late Tuesday afternoon where I immediately contacted Mr. Carey N. Baldwin, Director of the Zoo. As you know Mr. Baldwin was Director of the Portland Zoo before I assumed the position.

During my stay in San Francisco, I was the guest of Mr. and Mrs. Baldwin and stayed with them at their home. Incidentally, this house is supplied to the Baldwins by the City of San Francisco. It is situated directly in the zoological park.

I was given a key to the zoo. This key permitted my entry to all gates, cages, etc. and thus I freely moved in and out of the park and could closely inspect all installations.

Unfortunately I did not have the opportunity of meeting Mr. Herbert Fleishhacker, Park Commissioner. Mr. Fleishhacker, I understand, is still the most important personality connected with the zoo.

As you know the zoo is located in Golden Gate Park. It is really scattered. In Golden Gate Park proper, the zoo maintains, extensive corrals which houses herds of deer, elk, buffalo (bison), sheep, goats and other hoofed stock. These animals are cared for by the zoo staff. The corrals are in good repair and there is ample barn space for storing hay, straw, grains, equipment, etc.

In another part of Golden Gate Park, there is a children's playground. A children's zoo has been recently installed and is proving to be extremely popular. It is cared for by a zoo keeper. This adjunct of the zoo consists of a small building shaped like a barn. It is gaily painted and has the familiar cock weather vane. A rustic low fence surrounds this barn;- forming a sizeable

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Without the extreme cordiality and interest of the commission we should have been severely handicapped. In most cases they arranged the major part of the procedures. They went so far as to supply me with interpreters and persuaded the crews to part with their animals after they had been convinced that it would foster friendly relations.

This is a wonderful opportunity for us to secure other animals and birds, particularly during the present emergency when exhibits of value are difficult to obtain. I also feel that these contacts will be invaluable during the post war era when we propose to expand our zoological park.

With a little encouragement, I am certain that the Soviet Purchasing Commission will continue to have an interest in our zoo and will help us to secure rare animals in the future.

Therefore, if you feel as I do, may I respectfully suggest that you send a note of expression to the Soviet Commission thanking them on behalf of the City for their interest and courtesy assuring them that we appreciate their efforts and hope for continued enthusiasm now and after the war. I am certain that it will be regarded with deep sincerity.

The letter may be addressed as follows:-

Soviet Government Purchasing Commission
Attention of Mrs. N. M. Osipovitch
603 S. W. Oak
Portland 5, Oregon

Cordially yours,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

enclosure. A milk cow is kept in the barn. Incidentally this cow is milked and the milk is used to feed zoo babies. Lambs, baby goats, shoats, chickens, ducks roam freely in the enclosure. A side enclosure, houses a number of albino hares. All of these animals may be petted by children. This is an extremely popular exhibit and well worth while. I would recommend a similar exhibit for Portland and I have given the subject considerable thought. I should be happy to submit plans at any time. As a matter of fact I have laid the groundwork for a Baby Pet Zoo for the Portland Zoological Park.

The San Francisco Zoo proper is located several miles south of the Golden Gate Park. It occupies approximately one hundred acres. I understand that they have about forty additional acres available for expansion.

The main part of the Zoo is divided into two parts:- old and new. The old part is built in a semi-circle with exhibits also occupying the space between the horns. The old part is extremely old but an attempt is made to keep the bars and mesh in a state of repair sufficiently strong ~~enough~~ to maintain the types of animals housed.

Monkeys, birds, small mammals, kangaroos, zebras, nilghais, water buffalo, zebu, giraffes, polar bears, cats, etc. are kept in this area.

The new zoo consists of a beautiful central promenade which leads to the new exhibits. These new exhibits, include a tremendous indoor and outdoor flying cages, in which are housed aquatic birds.

There is also a gigantic elephant house with all the latest improvements. It is moated both inside and out. At present it houses, a tapir, four elephants and a number of peccaries.

The modern cat house is a tremendous affair with indoor cages and outside grottos. It houses, lions, tigers and leopards. Also some hyaenas.

Other outdoor grottos include those for bears, coyotes, and smaller animals. There are indoor sleeping compartments for all animals.

A large sealion pool is a most popular exhibit and daily exhibitions are given to the visiting public. As you know these animals are native to Oregon and I strongly recommend that a sealion pool be included in the future Portland Zoo.

Another popular part of the new zoo includes a gigantic monkey island. It is an amusing place and is generally well attended by the visiting public.

All of these installations, both old and new, were personally inspected by me. I spent a great deal of time "behind the scenes." This new zoo has been constructed mainly by funds supplied by the W.P.A. For the most part they did a good job, although a number of errors managed to creep in.

It is obvious that much of the difficulty could be avoided if the advice of a trained zoo man had been heeded. For example, all the new buildings face either directly north or south, or east or west. This is an old practise and generally makes the north side of the building valueless for exhibition purposes since it does not permit the sunlight to freely enter. The entire north side of the cat house, for example, is valueless thus representing a waste of many thousands of dollars. The elephant building is better off, since there are no exhibits on the north side. If these buildings had been ~~built~~^{turned} forty-five degrees in any direction these mistakes would have been eliminated.

Other errors, deal with improper drainage, improper color ingredients mixed with the concrete, and trap doors much too complicated to be practical.

There is a great deal of waste space in the basements, since they were constructed too low to be of use as a storage space and hence cannot be used for any purpose. I understand that all of the doors (to animal enclosures) were built too low and thus it is difficult for the keepers to service the exhibits properly.

All in all, I might say that the new zoo is a beautiful place and with the exception of a few details that I mentioned, is a functional set-up.

A restaurant, operated by the City, is located in a central point and provides a place where visitors and zoo staff may meet for food and refreshments.

New plans for expansion of the zoo are extensive--but the city is not waiting for the end of the war. While I was in the city--an appropriation was set aside for a zoo arena. This arena is to be used for animal acts.

The zoo is provided with ample space, away from the public's view in which are housed sick animals and others that must serve a period of quarantine before they are placed on exhibition.

No admission fee is charged and there is no charge for any of the animal acts. However, I believe a post-war charge of a few cents is being contemplated. Concenssions such as the donkey rides and steam engine train rides are charged for.

Suitable equipment to deal with escapes and the shifting of dangerous animals is provided.

My association with Mr. Baldwin's staff was most enjoyable. I was shown every courtesy and cooperation and I wish to take this opportunity of placing some of their names in this report. Thanks are extended to Head Keeper Van Dyne, Asst. Head Keeper Baker, Keepers, Behre, Snow, Wills, Duffy and others too numerous to mention.

Mr. Baldwin presented to the Portland Zoo, two peccaries, two coatis, 3 yellow-naped parrots, and a number of parrakeets. The Portland Zoo will reciprocate with a pair of red foxes and possibly later with some of our superfluous stock.

The San Francisco Zoo is well aware that a war is being waged. It is constantly brought to their attention. Adjoining the zoo is U.S. Army Camp Funston. Daily one may witness anti-aircraft practise and ack-ack guns fire directly above the zoo. Several times a week one may hear the tremendous coastal guns firing at targets out in the Pacific Ocean. The concussion from these big guns is terrific and the entire zoo shakes with every round fired from these guns. Machine gun fire may also be heard from the zoo.

My opinion is that the zoo is fortunate in one way. That is the animals are now accustomed to loud gunfire and seem to take little interest in the proceedings. In the event of an actual attack, I believe that the animals would be content to remain in the comparative safety of their enclosures and cages.

Unfortunately, I cannot say that the same condition exists with regard to the Portland Zoo. Our large animals are extremely concerned whenever a plane flies low over the zoo located in Washington Park. Our large cats pace nervously on these occasions.

Recently, the City of San Francisco made an appropriation of one thousand dollars for the purchase of high caliber rifles and numerous shotguns, with a large supply of ammunition for the fire arms. These guns and rifles are located all over the zoo and are placed in special boxes, painted red.

All men are required to attend rifle practise at least once a week. Director Baldwin states that the shotguns are more practical than the rifles in the event of an escape.

Every man at the zoo has a special post assigned to him in the event of an emergency. The Auxiliary Police, which is like our Veterans Guard and Patrol are also assigned to duty, but all are stationed at points outside of the zoo grounds.

The City has also supplied the zoo with a fire pumper and other fire fighting equipment. There are regular practise periods and one took place while I was visiting the zoo.

There is also an excellent signal system which consist of horns placed in various parts of the zoo. Each key man is acquainted with his signal and when the horn is sounded--the particular man is required to report to the office.

This emergency program is in no way connected with the Office of Civilian Defense.

On one day I conferred with various officials of the 9th Civilian Defense Region. I extended the compliments of the Portland's Civilian Defense Council to Mr. George L. Levison, Deputy Regional Director and Mr. Loughner in charge of the Protective Services.

With these two gentlemen, I discussed at length, the program of the Animal Defense Council as it is set up in Portland. They expressed much interest in our program as I outlined the details.

According to these gentlemen, the program as it exists in Portland is unique, at least in so far as the 9th Civilian Defense Region is concerned.

In the San Francisco Region, Animal Defense is under the supervision of the local Red Star Animal Relief representative who is the head of the local Humane Society. This relief is only extended to include such household pets as cats and dogs.

Our Portland program includes, slaughterhouses, stockyards, riding academies, stables, pet shops and the zoo.

Copies of the Animal Defense Bulletins were left at the Regional Office and others will be sent down as they appear.

All objectives of the trip were completed, although lack of time prevented a close examination of details regarding actual construction of the new part of the San Francisco Zoo. This can only be accomplished by examining the building plans while on the spot.

Respectfully submitted,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

CITY OF PORTLAND
INTER-OFFICE CORRESPONDENCE
(NOT FOR MAILING)

January 21, 1944



From Dept. of Portland Zoological Park
To Dept. of Department of Finance
Addressed to Commissioner Kenneth L. Cooper
Subject Progress Report for Portland Zoological Park- 1943

Dear Commissioner Cooper:

I have the honor to submit the attached report on the progress and activities of the Portland Zoological Park from January 1, 1943 to December 31, 1943.

Respectfully submitted,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

*Keyser has a
duplicate of this
2-4-44*

*(Note - This report
is incorporated in
Keyser's report for
the entire Bur. of Ples.*

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C
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Y

August 27, 1943.

Mr. Donald J. Sterling,
Managing Editor,
Oregon Journal,
Portland, Oregon.

Dear Mr. Sterling:

You have contributed notably to the war effort and are familiar with the keys in Washington.

We are getting into a fix over Sutor's grizzlies. We never did get adequate quarters for them, and since we accepted a half grown Kamchatka bear as a gift from the crew of a Russian ship, we have three great bears by the tail.

So we worked out a plan to partition off a corner of the black bear enclosure with a new den for the grizzlies, with the intention of shifting the Kamchatka bear into present grizzly space before he grows too large to come out through the door in the monkey cage he is now occupying.

We have today filed a plan and application to construct the new grizzly quarters with the local W.P.B. office, and have their assurance that it will be forwarded to Washington without delay. We require no critical materials, and I understand nothing that requires priorities with the possible exception of nails for form lumber and some insignificant welding supplies.

We stoutly maintain that a zoo contributes materially to the war effort as an essential leisure time filler. Witness the attendance figures in the London Zoo, greatly increased in 42 over 41 after some animals had been evacuated and then brought back. Our own little zoo has shown more attendance since the war is on than ever. Moreover, we are not asking for an extension or a development, merely a rearrangement that would normally be classed as a maintenance item.

I am afraid if this application goes to Washington cold, we won't get out of our fix. I thought perhaps you might know whom to coax around to our patriotic view.

I have discussed this question with Mr. Sutor on the phone, giving him the main points. Attached is a print of the works.

Yours very truly,
SUPERINTENDENT OF PARKS

K:d

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PROGRESS REPORT FOR THE

PORTLAND ZOOLOGICAL PARK

From

January 1, 1943

to

December 31, 1943

Respectfully submitted by

Arthur M. Greenhall, Director

Portland Zoological Park

I have the honor to submit the following report on the progress and operations of the Portland Zoological Park from January 1, 1943 to December 31, 1943.

IMPROVEMENTS AND REPAIRS:

1. Concrete floor laid on north side of the Buffalo Barn.
2. Buffalo Barn and Lower Barn resingled.
3. Roof of Main Building completely repaired. (papered and tarred)
4. Large Flying Cage repaired and braced. Cage collapsed on January 21st, after 18 inch snowfall.
5. Side of hill behind Sun Bear's quarters protected with rock to prevent mud slides.
6. Rear of Sun Bear's quarters tiled to drain water.
7. Rock steps laid at side of Sun Bear's quarters to facilitate servicing.
8. Area above Sun Bear's quarters fenced with chicken wire to prevent children from falling down hill.
9. Blacktop placed on service walks of lower string of outside cages.
10. Miscellaneous blacktop patching jobs.
11. Lower string of outside cages rewired.
12. Owl cage rewired.
13. Front bars of Black Bear dens scraped, red-leaded and painted black.
14. Rear retaining wall of Black Bear dens reinforced with concrete.
15. NEW GRIZZLY BEAR QUARTERS CONSTRUCTED.
16. Crushed rock placed in Wart Hog enclosure to keep hog out of winter mud.
17. Four electrical outlets installed in Main Building.
18. Maternity boxes installed in large cat cages.
19. Concrete wading pool and drain installed in large Flying Cage.
20. Several new water outlets installed to facilitate servicing.
21. Several new drains installed in outdoor cages.

22. Sleeping quarters installed for:- Polar Bear, Coatis (winter quarters), 4 Monkey Cages, Wallaroos and Wallaby (summer and winter quarters), Beavers, Skunks, Owls, Hawks, Fitch.
23. New playthings placed in monkey cages.
24. New stall built in Lower Barn.
25. New hay rack installed for Wallaroos and Wallaby.
26. Covered seed trough constructed for large flying cage.
27. Two new plants replace old ones in Main Building.
28. Two large canvas squares secured to shield cages when animals are sick or nursing young.
29. About 20 wooden feeding troughs built and placed into service. Dry feed, fruits and vegetables are placed in these troughs instead of old unsanitary procedure of placing feed on dirty floor. These troughs are cleaned every day.
30. Sea Eagle shifted to new cage and tree limbs and perches placed in such a way to permit the eagle to fly without hurting itself. Provides for the maximum amount of space.
31. Kamchatka Brown Bear transferred to old grizzly bear's cage.
32. Trapdoor installed on Ocelot cage to protect keepers at feeding time and cut down chances for animal's escape.
33. Trapdoor installed on Bobcat cage. This protects keepers and prevents escapes during feeding time.
34. One-way directional and other signs erected in zoo by the Traffic Safety Commission.
35. Heavy link wire placed in front of two large cat cages on inside of south side of Main Building. This will prevent accidents to keepers during feeding time and keeps animals from reaching through bars to claw keepers as they walk by cages.
36. Various trap-doors and cables repaired in Main Building.
37. New motor installed for refrigerator.
38. Large vice secured for repair and construction work.
39. New hay knife secured for cutting baled hay.
40. Black and tackle secured to facilitate the handling of sides of horsemeat. This equipment permits one man to hang meat on hooks.
41. 3 stirrup-pump cans issued to zoo by Office of Civilian Defense.
42. New crescent wrench secured for zoo.

PUBLIC RELATIONS:

1. Sincere acknowledgment is extended to both of Portland's newspapers for the interest and cooperation extended to the Zoo during the past year. A fairly accurate count of news clippings show that for the year of 1943 there were about 123 items or approximately 2 1/2 per week. Of these items there appeared:

- 8 - front page stories
- 5 - Sunday magazine features
- 3 - editorials
- 9 - letters to the editors

There were a number of items in out of town papers; one item in LIFE and one picture in NEWSWEEK. PARKS & RECREATION, the official magazine of the American Association of Zoological Parks and Aquariums has been regularly supplied with notices of interest relating to the activities of the Portland Zoological Park in order that other zoos and interested people may learn of our progress.

A short series of Zoo Stories written by the Director appeared in the magazine section of the Sunday Oregonian.

2. Sincere thanks is extended to the various radio news casting staffs of the local radio stations for the interest they have shown in the progress of the zoo. Several stories went over nation-wide hookups and have been heard directly from New York, Chicago, San Francisco, Hollywood, Los Angeles and Seattle.

The radio program "Who's Who At The Zoo" was concluded in January after a successful 13 week run over station KALE. This program received honorable mention at the Radio conference held in Chicago and was considered one of the most popular school programs to have been piped into the Portland Public Schools.

3. The following lectures were delivered away from the Zoo:
 - Izaak Walton League of America (with Mr. C.P. Keyser)
 - Junior Chamber of Commerce (with Com. K.L. Cooper)
 - Breakfast Club (with Com. K.L. Cooper)
 - Agenda Club (with Com. K.L. Cooper)
 - Playground Director's Meeting
 - Vanport Housing Project
 - University Homes Housing Project
 - Lewis and Clark College (with Com. K.L. Cooper)
 - Oregon Audubon Society (with Com. K.L. Cooper)

4. The following talks and tours were given at the Zoo:
 - Park Bureau Tours (once a week during July and August)
 - Various schools, clubs, societies and scouting organizations
 - To groups of members of the Armed Forces visiting the Zoo.
 - Group of Mexican Farm Workers
 - Groups of Russian Seamen

5. Special Guests at Zoo
 - City Commissioners
 - Governor Earl Snell
 - Boris Karloff (stage and screen actor)
 - Muriel Hutchison (stage and screen actress)

SPECIAL ACTIVITIES AND EVENTS:

1. Mr. and Mrs. Virilis Fischer of Portland, Oregon donated the sum of \$50.00 for the purchase of a Sun Lamp. This lamp was purchased and used on those animals that require treatment. Fortunately, there have been few extended periods of cloudy days during the year so that use of the lamp was cut to the minimum.
2. About the middle of May, the Director of the Zoo visited the San Francisco Zoological Gardens. The purpose of the trip was to inspect details of construction and operation in connection with plans for a new Portland Zoo. The California Zoo presented Portland with 2 Collared Peccaries, 3 Yellow-naped Parrots, 2 Coatis and a number of Green Shell Parrakeets. Later on, the Portland Zoo presented San Francisco with a fine pair of Red Foxes.
3. On Sunday, June 6th the largest crowd on record visited the Zoo. It was estimated that between 25,000 and 30,000 people visited the collection. The largest crowd prior to this date was estimated to be about 10,000. For the most part, our attendance records have increased on other days.
4. On October 14th, the Zoo received as a temporary "guest" the prize barrow won by Governor Earl Snell from Governor Dwight Griswold of Nebraska. This hog was won by Oregon's governor as a result of a wager between Gov. Snell and Gov. Griswold as to the relative performance between the two states during the Third War Loan Drive. The pig will remain until the Fourth War Loan Drive in 1943 when Gov. Snell will make provision for its disposal.
5. Investigations at the Zoo regarding the critical food shortage and poisonous snake bite procedure were conducted during the year.
During the year, particularly during the winter months, the zoo experienced difficulty in securing hay. Most of the hay supplies were routed directly to the important dairy industry. To forestall such an emergency during the coming winter--a large haystack of hay cut from city property was placed in the zoo. This has helped enormously and the hoofed stock has been using this supply from harvest time in late August and September right up until the first of 1944. In addition to this the Park Bureau authorized the purchase of the entire year's quota of hay to be purchased in advanced and stored in our barns. Some 600 bales of alfalfa and timothy hay were secured. In this way we do not compete with the dairy industry in case of a shortage.

We also learned of a source of supply of inexpensive eggs. On the suggestion of one of our keepers we are now purchasing "blood-spot" eggs which are suitable for animal feed although unsuited for human consumption.

We have also been successful in using special prepared dog foods. This is a balanced ration that is relished by a great

number of our animals that are partial to meat. By using the dog food and the eggs we have been able to cut down our consumption of horse meat. This experiment was not intended to do away with the use of horse meat but rather to find out if we could carry on in case the horse meat should not be available. It has been found that the use of dog food and eggs is extremely economical.

To offset a shortage in vegetables the Bureau of Parks cultivated a Zoo Victory Garden. Between July 9th and December 30th the garden produced as follows: (the garden is still producing during the winter of 1944)

Stock beets - - - - -	13,150	pounds
Stock carrots - - - - -	6,254	"
Kale - - - - -	7,100	"
Swiss Chard - - - - -	1,582	"
Cabbage - - - - -	200	"
Sunflower seeds - - - - -	575	"
	<u>28,861</u>	"

This was approximately 14 1/2 tons

Special work was done regarding the first aid treatment for poisonous snake bite with special regard to those serpents that may be encountered by members of the armed forces in the various theatres of war. A paper is being prepared.

6. On November 3rd our two Grizzly Bears, Maggie and Jiggs were installed in their new quarters. Commissioners, Cooper and Peterson, Mr. C. P. Keyser, Supt. of Parks, other city officials, members of the press, armed members of the Police Department and other interested persons were present to witness the event.
7. On December 20th, with official approval by Commissioner Kenneth L. Cooper, Arthur M. Greenhall, Zoo Director was appointed, Inspector of Foreign Birds and Mammals. This appointment came from the United States Department of the Interior, U. S. Fish and Wildlife Service, was issued in Washington, D. C. The duties are to inspect all foreign birds and mammals entering the Port of Portland. There are only six other such appointments in the United States.
8. On November 10th, Robert Moses, Supt. of Parks, New York City presented to the City of Portland his report for Portland Improvement. The Portland Zoological Park was discussed in several sections of the report. On page 14 will be found this comment:
 "The present Portland Zoo is unworthy of the city and, incidentally, is not in the best possible place. Portland does not require a scientific zoological collection. What it needs is a simple, compact menagerie like the ones in Central and Prospect Parks in New York, easily accessible to the majority of citizens. After considerable searching we have recommended the acquisition of a new area which we be-

lieve is admirably suited to the purpose, provided it can be bought at a reasonable figure. If not, we recommend the reconstruction of the zoo at or near the present location in Washington Park."

Further mention of the Zoo is made under Part 3, Municipal Improvements by Small Contracts and Hire and Labor and on page 60 of the original report we find the following: "Another project which we believe will be a major asset to the City of Portland is the construction of a new and enlarged zoo. There are two alternate schemes which could be worked out: (1) reconstruct the zoo in Washington Park but spread it out so as to provide adequate exhibit space, and (2) acquire a large plot located so that it is easily accessible to the majority of the people in metropolitan Portland and build the zoo on this site. The latter suggestion is recommended. An adequate site can be found north of Benson Polytechnic School and east of Holladay Park on both sides of the ravine now used by the Union Pacific Railroad. This plot is now a privately owned nine-hole golf course which can be readily developed for park purposes. It should be acquired if it can be purchased reasonably. A substantial part of the area can be used as a zoo. This will tie together Buckman Field, Benson Polytechnic School and Holladay Park. The railroad ravine can be bridged. Some of the property might be used as a site for the addition to the Benson School. In this instance we do not recommend a large zoo like the Bronx Zoo in New York. The original cost would be too high and the cost of maintenance and operation could not be justified. A smaller zoo similar to those in many other cities would be fully as interesting; would provide a great variety of specimens and could be built and operated for a reasonable sum. New York City's Prospect Park Zoo is a typical example. Such a zoo carefully designed and properly located will be a most popular addition to the park system."

9. Last Fall, Commissioner Kenneth L. Cooper instructed the Zoo Director draw up plans for the proposed Portland Zoological Park. It was suggested that something unique in zoo presentation be devised. Elizabeth Rusk Greenhall prepared the illustrations. Mr. James James of Portland drew up plans and drawings for an Aquarium and Insectorium. After a considerable amount of research and hard work 30 large hand painted illustrations have been completed. In addition a 37 page report has also been executed. This report gives; details, considerations and pertinent information regarding the proposed Portland Zoological Park. The completed project would, we feel would "be a major asset to the City of Portland."

STAFF AND MISCELLANEOUS ZOO CONSIDERATIONS:

1. Staff: Sincere thanks is extended to George Searles, Head Keeper, the Zoo Staff, and those of the other Park Men who

have worked at the Zoo from time to time, for their interest and cooperation.

2. Accidents: Fortunately there were no major accidents or injuries sustained by visitors or to the zoo staff. Vandalism was reduced to the minimum. The following instances of "incidents" are to be noted:
 - a. refrigerator motor burned out and had to be replaced
 - b. oil burner needed servicing on several occasions
 - c. various mud slides threatened installations. One behind the Sun Bear's quarters was corrected.
 - d. cracks and leaks in building continue due to slipping ground. The roof was repaired and that does not leak. Reference is made to leaks in flooring.
 - e. trap doors stick occasionally as the building moves
 - f. rats remain a problem and live in areas not easily accessible to poison baits
 - g. fire at zoo during one summer night. A brush fire was not put out and the feeding platform in the buffalo and deer range caught fire. The Fire Department was summoned on the recommendation of two members of the Veteran's Guard and Patrol who noticed the blaze and the Zoo Director who also noticed the blaze. It is interesting to note that the nearest fire hydrant to the zoo is located approximately one quarter of a mile away!
3. Policy of Exhibition:
 - a. old, sick, injured, crippled or unsightly animals will no longer be permitted to remain on public exhibition.
 - b. animals that do not meet the standard set will no longer be acceptable either as a gift or deposit or loan.
 - c. all animals in the collection, whether city property or loans or deposits will receive veterinarian attention whenever such treatment becomes necessary.
 - d. city has complete jurisdiction of all animals in the collection, particularly loans or deposits as to feeding, care and housing, veterinarian attention or other considerations.
 - e. city will not be held responsible for the loss of any animal for any reason whatsoever. This includes injuries. This last pertains particularly to animals on loan or deposit.

RECOMMENDATIONS:

1. All animals that come to the zoo, whether city property or loans or deposits receive an object number which is recorded in the files of the Auditor's Office. With reference to loans or deposits, it is suggested that a form be drawn up to include the details of the zoo's policy of exhibition as mentioned immediately above. This form should be checked by the City Attorney. Finally this form should be signed by the person making the deposit or loaned. One copy should be filed with the Bureau of Parks and another filed with the Zoo Director.

2. A "squeeze cage" should be constructed so that it will be possible to medicate and otherwise safely confine the more dangerous animals when the occasion arises. This cage should be on wheels so that it may be used as a shifting cage. It would be a good investment for present and future use.
3. A small infirmary to house sick and injured animals is greatly needed. It should have either an electric heater or other heating device to keep the building warm when necessary. At present sick or injured animals are hospitalized in the keeper's quarters. This arrangement is not satisfactory.
4. About two loads of sand are needed to place on the floor of the large flying cage.
5. Parking space should be completely gravelled.
6. All visitor's walks and paths should be covered with blacktop, particularly the patch leading from Fairview Blvd.
7. Protective railings both inside and outside of Main Building should be fitted with link mesh or netting for greater protection.
8. Improved ventilation is needed in the Main Building. This condition of poor or almost lacking ventilation has persisted since the building was constructed.
9. There is imperative need for lights in the lower barns. Lights are particularly needed during the winter months.
10. There are a number of minor recommendations.

ANIMALS ACQUIRED DURING THE YEAR WERE:

Mammals:

- 1 - Monkey, Gray Capuchin - Gift, Mr. & Mrs. Dan Hine, Milwaukee, Ore.
- 1 - Monkey, Rhesus - Gift, Mr. & Mrs. Lloyd Grimsrud, Oswego, Ore.
- 1 - Monkey, Rhesus - Gift, Mr. George S. Adams, Hood River, Ore.
- 1 - Monkey, African Green - Gift, Mr. George S. Adams, Hood River, Ore.
- 1 - Monkey, Java - Gift, Grandma's Kitchen, Portland
- 1 - Monkey, Rhesus - Deposit, Mrs. Edith Benedetti, Portland
- 1 - Badger, California - Gift, Mr. Cecil Montgomery, Albany, Ore.
- 1 - Bear, Himalayan Black - Gift, Crew of Soviet Ship
- 1 - Bear, Polar - Gift, Crew of Soviet Ship
- 2 - Bobcats - Gift, Boise City Park Department, Boise, Idaho
- 2 - Coatis - Gift, San Francisco Zoological Gardens, San Francisco, Cal.
- 1 - Cougar, Oregon - Gift, Mr. H. W. Fowler, Gardiner, Ore.
- 2 - Coyotes - Born in Portland Zoological Park
- 2 - Fitch, Russian - Trade for one Albino Fitch, ~~Wm. R.~~ Hornych, Ore. City
- 2 - Foxes, Gray - Gift, Mr. Hohn Deininger, Oregon City, Ore.
- 3 - Leopards, Indian - Born in Portland Zoological Park
- 1 - Raccoon - Gift, Mr. George Gurley, Molalla, Ore.
- 1 - Raccoon - Picked up by Zoo Keeper in Portland

- 1 - Raccoon - Gift, Mrs. Walter Creighton, Rhododendron, Ore.
- 3 - Skunks - Gift, Mrs. A. L. Ziesing, Portland
- 1 - Lion - Born in Portland Zoological Park
- 2 - Hamsters, Golden - Trade for 10 White Rats, P. A. Evans, Portland
- 2 - Porcupines - Gift, Oregon Humane Society, Portland
- 1 - Rabbit, New Zealand White - Gift, Mr. M. H. Holtz, Portland
- 1 - Aoudad - Born in Portland Zoological Park
- 4 - Deer, White Fallow - Born in Portland Zoological Park
- 1 - Goat - Gift, Mr. Richard L. Griffin, Portland
- 1 - Goat - Gift, Mrs. Anna Sandman, Portland
- 1 - Barrow - Deposit, Governor Earl Snell, Salem, Ore.
- 3 - Peccaries, Collared - Born in Portland Zoological Park
- 2 - Peccaries, Collared - Gift, San Francisco Zoo, S. F. Cal.
- 1 - Wallaroo - Born in Portland Zoological Park
- 1 - Jackass - Deposit, Chief H. Niles, Portland

Birds:

- 2 - Hawks, Swainson's - Gift, Unknown party
- 2 - Guineafowl - Gift, Mr. E.W. Stimmel, Washougal, Wash.
- 2 - Peafowl - Gift, Mr. & Mrs. Fred Meyer, Portland
- 1 - Peafowl, White - Captured in Portland!
- 1 - Peafowl, White - Gift, Mr. R. R. Adams, Portland
- 1 - Pheasant, Golden - Gift, Col. G.T. Woodlaw, Portland
- 2 - Pheasants, Golden - Gift, Mr. Edward Jordan, Portland
- 2 - Pheasants, Silver - Gift, Mr. Edward Jordan, Portland
- 1 - Pheasant, Chinese - Gift, Mr. Edward Jordan, Portland
- 5 * Parrakeets, Green Shell, - Gift, San Francisco Zoo, S. F. Cal.
- 3 - Parrots, Yellow-naped - Gift, San Francisco Zoo, S. F. Cal.
- 1 - Parrot, Blue-fronted - Gift, Mrs. Carl F. Butz, Portland
- 1 - Owl, Dusky Horned - Gift, Mr. Edward T. Herrmann, Portland
- 1 - Owl, Dusky Horned - Gift, Mr. Frank Calcagno, Portland
- 1 - Owl, Dusky Horned - Gift, Mr. James S. Robertson, Vanport City, Ore.
- 1 - Owl, Dusky Horned - Gift, Mr. R. J. Higdon, Vancouver, Wash.
- 1 - Owl, Snowy - Gift, Crew of Soviet Ship

Reptiles:

- 1 - Alligator - Gift, Mr. & Mrs. Carl Wooldridge, La Center, Wash.
- 5 - Alligators - Gift, Mr. Percy Allen, Portland
- 2 - Rattlesnakes, Western Diamond-back, - Gift, Mr. Fred Meyer, Portland
- 1 - Whipsnake, Green - Gift, Mr. Fred Meyer, Portland
- 1 - Tortoise, Desert - Gift, Mrs. Wilfred Hill, Portland
- 1 - Snake, Indigo - Gift, Mr. & Mrs. Wm. Ossander, Astoria, Ore.

ANIMALS DISPOSED OF DURING THE YEAR WERE:

Mammals:

- 1 - Bear, Cinnamon - died, senility, blind (shot by vet.)
- 2 - Bison - died
- 1 - Bobcat - escaped (later shot)
- 1 - Bobcat - died
- 2 - Coatis - died
- 4 - Deer, Black-tailed - died
- 1 - Deer, White Fallow - died
- 1 - Fitch, Albino - trade
- 2 - Foxes, Red - gift to San Francisco Zoo

- 1 - Fox, Red - died
- 1 - Jaguar - returned to owner
- 1 - Leopard - returned to owner
- 2 - Leopards (cubs) - died
- 1 - Lion (cub) - died
- 1 - Monkey, African Green - died
- 1 - Monkey, White-faced Capuchin - died
- 1 - Monkey, Java - died
- 1 - Monkey, Rhesus - returned to owner
- 2 - Nilgai - died
- 2 - Ocelots - died (one returned to owner) (both deposits)
- 2 - Peccaries, Collared - died
- 2 - Porcupines - died
- 2 - Raccoons - escaped
- 2 - Raccoons - died
- 1 - Sheep, Mouflon - died
- 1 - Tiger, Bengal - returned to owner

Birds:

- 2 - Doves, White - died
- 2 - Hawks, Western Red-tailed - died
- 1 - Owl, Dusky Horned - died
- 1 - Pheasant, Golden - died
- 1 - Pheasant, Silver - died

Reptiles:

- 2 - Turtles, Box - died
- 1 - Lizard, Gila Monster - died
- 1 - Snake, Green whipsnake - died
- 1 - Rattlesnake, Pacific - died
- 1 - Rattlesnake, Western Diamond-back - died
- 1 - Snake, Indigo - died

(Note: Causes of death, when known, and final disposition are recorded in the files of the Bureau of Parks, Portland Zoological Park and the Inventory Division of the Auditor's Office. This information is too lengthy for inclusion in this report.)

Respectfully submitted,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

PORTLAND ZOOLOGICAL PARK
115 City Hall
Portland 4, Oregon

November 25, 1944

Mr. C. P. Keyser, Supt.
Bureau of Parks
115 City Hall
Portland 4, Oregon

Dear Mr. Keyser:

It is the request of Commissioner Cooper that all recommendations pertaining to the safety of the staff or/and animals at the Portland Zoological Park be submitted in writing. The following has been discussed with either you or Mr. Nussbaumer but since they should be in writing I am now doing so.

1. While on leave of absence, Dr. Howes, Vet. ordered that the Kamchatka Brown Bear be returned to the old grizzly bears' quarters. The Polar Bear which was in the grizzly cage was moved to the Main Building to make room for the Brown Bear.

It is my opinion that the Brown Bear could be returned to the large bear pit with the seven Black Bears. I recommended that a shifting cage be constructed so that the Brown Bear could be handled while the keepers service the large bear pit.

This recommendation was made for the following reasons:-

1. The Polar Bear could be returned to the old grizzly den with no changes needed for the den with the exception of the building of a swimming pool for the animal.

The Polar Bear is now in a cage that used to house lions and tigers. The cage was originally constructed to house monkeys and was never suitable nor strong enough to house the large cats. The Polar Bear is now working on this cage so that in time--I predict an accident or escape.

Mr. Nussbaumer feels that this cage can be constructed

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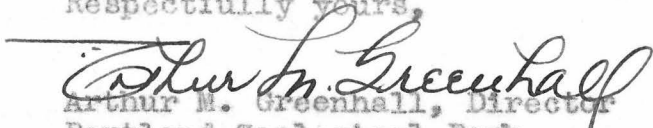
so as to be satisfactory for the needs of this animal. I feel that this animal should be kept out of doors and be supplied with a pool. However, at the date of this writing, I do not exactly know what Mr. Nussbaumer proposes so that I shall suspend partial judgement. I do feel that the animal should be kept in the other cage. If in my opinion, Mr. Nussbaumer's suggestion is not suitable or practical for the welfare of the animal or staff--I shall go on record as saying so and not be responsible for the results.

2. The second recommendation deals with the cages in the Main Building which house the Himalayan Black Bears. The doors of these cages depend solely on the strength of the lock hasp to keep them shut and locked. The bears now have learned to pull on these doors and will shortly break them open--thus will become a menace to the staff, public and may injure themselves.

I recommend that the doors be reinforced in some simple or practical manner. This suggestion has already been submitted orally for approval.

Mr. Nussbaumer has assured me that he will give these matters his attention.

Respectfully yours,


Arthur M. Greenhall, Director
Portland Zoological Park

cc: Commissioner Cooper



C. P. KEYSER
SUPERINTENDENT

CITY OF PORTLAND, OREGON

DEPARTMENT OF FINANCE
KENNETH L. COOPER, COMMISSIONER

BUREAU OF PARKS
314 CITY HALL

PORTLAND ZOOLOGICAL PARK
115 City Hall
Portland 4, Oregon

March 5, 1945

Major Carl T. Sigman, Acting Chief
Arctic, Desert and Tropic Branch
U.S. Army Air Forces Tactical Center
Orlando, Florida

Dear Major Sigman:

You may be interested in certain thoughts which have bearing on the Colonel's comment regarding snakes in the South Pacific and mentioned in your letter of February 19, 1945.

My experiences have been confined to the western hemisphere but I have made certain observations which have indicated that venomous snakes are most noticed in cultivated areas, such as plantations, near farms and human habitation, etc.--or in any area undergoing a drastic change, such as clearing, road construction, blasting, brush and forest fires and the like. The simple explanation for the apparent abundance of snakes is, I think, the fact that there are more people around to see the animals.

A single "forced down" aviator in a tropical jungle would be less apt to encounter poisonous serpents than a company of men engaged in clearing a sizeable camp or building a road in the same area.

A number of years ago in the Madden Dam area of Panama numerous poisonous snakes were killed after actual construction was started. Roads were put through, trees cut down, hills blasted, etc. Then the snakes were seen for they were literally uncovered. Initial jungle surveys in the same area before construction only indicated the usual stories that snakes were there--but nothing unusual.

In Cuba, during the revolutions of 1931 and 1932, I generally found snake hunting (non-poisonous of course) good after any small skirmish took place--particularly if there had been cannonading. Brush fires in Cuba always netted a good haul of reptiles especially on the fringes of the fires.

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About 120 air miles from your base in Orlando, Florida you will note the town of Venice on the west coast. I spent time there hunting rattlesnakes a number of years ago. I had little luck until a palmetto fire got started and we picked up, within a short time, 8 large Florida Diamond-back Rattlesnakes that had crawled onto the golf course to get away from the heat and flames. I had spent days in the same area previously and saw nothing.

A number of factors must be taken into consideration in searching for poisonous snakes. The time of the year and the time of the day are the most important since they embrace most of these factors. We know, for example that snakes "hole up" or aestivate in any tropical region when there is a prolonged dry spell. At the onset of the first heavy rains--serpents then make their appearance presumably having been washed out of their sleeping quarters--but probably more important--the fact that they now can secure drinking water without which any active snake will perish. Therefore, my experience has shown that the start of the rainy season is a good time to hunt snakes in tropical regions.

Snakes cannot stand intense direct sunlight for very long. A temperature of about 116°F will prove fatal to almost any snake within ten minutes. During the heat of the day--they hide in some shady spot. Therefore, the hours around dusk, shortly after dawn and the early morning are the best times to find snakes in the tropics. Severe drops in temperature will also immobilize snakes so that in the tropics snakes are not apt to be active after midnight to the hour of dawn.

I have found very few snakes on nights when a bright moon was shining. This may be due to the fact that other animals upon which snakes feed are also apt to be wary and restless due to the bright light that would make them more conspicuous.

The point that I should like to make is that a group of men coming to an area where poisonous snakes are known may encounter few or none but later on another group coming to the same area might see many examples.

Recently a well known Admiral came to Portland and the subject of snakes was brought up. I was not present at the conversation but several city officials told me the following since they thought I would be interested:- The Admiral informed them that snakes were a problem particularly in certain landing operations when men encountered schools of sea snakes. Sea snakes are found only in Pacific waters and are related to the dangerous cobras and coral snakes. Most of them are deadly, although bites are rare. There are a variety of species and different temperaments. Some may be handled with impunity. The Admiral did not say that men had been actually bitten but it is conceivable that some might have been. It is not a pleasant experience to wade through a school of several hundred sea serpents--knowing that they are in actuality a type of cobra--even if you are fortified with the knowledge that they seldom attack and bite.

To the wave of men meeting a school of sea snakes, the

story told obviously would be different than the one told by the wave of men who did not meet any of these reptiles.

You are entirely correct when you say that the problem is really one of morale and I dare say that the psychological factor enters into the snake bite story--possibly fifty percent. For this reason, the Admiral told our officials that not too much is made of the snake bite problem since it is apt to lower morale.

I have talked with service men who have returned from operations in certain Pacific areas and learned something of the serviceman's point of view. They spoke of snakes, snake bite, etc., and after seeing our exhibit felt that it was serving a useful purpose.

In summarization it would appear to me, as one not having been in a combat area during this war, that it is entirely possible for men to run into poisonous snakes in any area where they occur--particularly after heavy activity, in fox holes perhaps. Snakes are more apt to be encountered by the Infantry than the Air Forces. That any information that will offset bad psychological reaction which in turn affects morale, is worth while. For this reason we sincerely commend the fine series of publications being issued by your branch of the service.

Finally, I hope that the time will not be far off when it will be possible for our medical officers to avail themselves of what will be left of the Institute for Infectious Diseases, Tokyo, Japan! (SEE, Medical Series I, No. 4 "Poisoning By Snakes" p. 5, para. 3, last line.)

Again with sincere thanks for your courtesy, I remain,

Cordially yours,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

cc Kenneth L. Cooper, Com.
Dept. of Finance



C. P. KEYSER
SUPERINTENDENT

CITY OF PORTLAND, OREGON

DEPARTMENT OF FINANCE

KENNETH L. COOPER, COMMISSIONER

BUREAU OF PARKS

314 CITY HALL

PORTLAND ZOOLOGICAL PARK

115 City Hall

Portland 4, Oregon

March 13, 1945

Mr. C. P. Keyser, Supt.
Bureau of Parks
115 City Hall
Portland 4, Oregon

Dear Mr. Keyser:

The zoo is in sore need of some new animal residents for the Main Building and I should like to recommend that an ordinance be passed as soon as possible and funds secured for the repopulation of our depleted collection.

Animals, as well as all forms of life, do not last forever. Few have really long life spans and 15 to 20 years is considered to be good for the majority. As a matter of fact it is known that animals in confinement have longer life spans than those in the wild state. Zoo animals, after they reach a certain age, wear out and die like any piece of mechanical equipment such as autos, mowers, tractors, etc. used in the Bureau of Parks. When this happens, the animals or your equipment must be replaced or your service to the public is seriously impaired.

In the three years that I have been Zoo Director, we have purchased only 2 armadillos at \$5.00 the pair + F.O.B. The rest of the collection having been maintained by means of loans, gifts and trades. It is extremely difficult to maintain our exhibits on this bases for the reasons I shall list below.

LOANS As you know, this system has not worked--since the loans have come with so many strings attached that was not conducive to efficient zoo management and made an unbearable situation. Most of these loan animals were old and worn out, known as scrub stock, and resulted in unfavorable public criticism. After the animals were with us for awhile and by dint of hard work we either brought them back to health or encouraged breeding, the good animals were promptly removed by the owner for sale, trade or circus use. Last summer the following animals were removed from the Portland Zoo: 3 leopards, 6 lions, 1 wallaroo. You are acquainted with the doubtful status of the lions and wallaroo so I shall not repeat.

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GIFTS With the exception of the animals presented by the crews of Soviet ships and 1 wallaby, we have only received local animals and birds of little value. (Forgot to mention 3 Dingo Dogs--gift of the San Diego Zoo) With the exception of the above specified animals--most of the gifts have come as discarded pets:--no longer wanted by their owners for one reason or another. As a general rule--cast off pets do not make good zoo exhibits since they do not acclimate properly to our food and quarters. Most of them are either senile, neurotic, mean tempered or have been pampered as house pets. Even though they may come to us with no strings attached--their former owners often feel that their pets, particularly monkeys and parrots, should have special quarters, food and treatment.

ZOO TRADES

For the most part zoo trades have always been satisfactory but we have little trading stock left. By that I mean--the Portland Zoo has practically nothing in its collection worth trading--consequently we cannot rely on this method at the present time.

Recently we lost our Cougar--age 15 years and our Baboon--age 12 years. These losses added to the removal of 6 lions, 3 leopards and 1 wallaroo last summer, has almost completely stripped the zoo of spectacular exhibits. Practically all of our monkeys, 2 lions, 1 sun bear and parrots are all on the retirement list and may go at any time. It is highly unlikely and improbably that we could replace them by waiting for gifts or expecting to trade.

I do not recommend that our hoofed stock collection be increased except by gift due to the fact that the range land is infected with disease and also because our free roaming bison have killed a number of valuable animals in the past.

I therefore suggest that \$2000 be appropriated to restock our zoo building. This sum will include the F.O.B. charges. It is hard to say just what the final cost of any animal will be since that will be determined by its availability and distance from Portland. I shall try to obtain stock from either West Coast Zoos or other sources reasonably close to Portland since it will not use up so much money on shipping charges and permit us to buy more animals. I feel certain that animals, such as I shall list below can be obtained at the present time.

The sum (\$300) of money asked for in the new budget for our Animal Fund should be considered as a separate item since it is sufficient only to maintain our collection during the year. As a matter of fact, it has been customary to use this money to pay express and shipping charges on the few animals that we have received in the past.

I further suggest that the new animals be obtained now and not wait until the new budget is set up for these reasons:

1. We need the animals now since our busy season is getting

under way.

2. It takes time to locate and obtain available stock and if it is to be used for our heavy season we should not waste time.
3. Animals acclimate themselves easier during the spring of the year. The summer is too hot and the fall is too late.

The following is a list of desirable animals and birds and the approximate cost. There is nothing in the list which would require that our food costs be increased. Pairs, that is male and female, are recommended wherever possible since the animals do better and there is the possibility that our stock may be perpetuated for our own use as well as trading purposes to bring in new blood.

1 pair	Cougar.....	\$250.00
1	" Ring-tailed Cats.....	40.00
1	" Leopards.....	400.00
1	" Kinkajou.....	50.00
1	" Baboons.....	250.00
2	" Spider Monkeys.....	125.00

Mammals

1 pair	Bleeding Heart Doves...	20.00
1	" Toucan.....	50.00
1	" Tropical Cardinals.....	12.00
1	" Troupials or Bugle Bird	25.00
1	" Mynah Birds.....	50.00
1	" Cockatiels.....	20.00
1	" Roseatte Cockatoos.....	30.00
1	" Macaws.....	125.00

Birds

125.00*Total \$1487 + \$500 F.O.B.

*(If the macaws cannot be obtained then I would suggest that a female Agile Wallaby be secured since we have a male in our collection)

It is my hope that this request will receive a sympathetic hearing. The City would at least own a collection of animals, free and clear, with obligations to none.

Very truly yours,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

cc: Kenneth L. Cooper, Commissioner
Department of Finance

CITY OF PORTLAND
INTER-OFFICE CORRESPONDENCE
(NOT FOR MAILING)

October 3, 1945

From Dept. of FINANCE - Bureau of Parks - PORTLAND ZOOLOGICAL PARK

To Dept. of FINANCE - Bureau of Parks

Addressed to Mr. C. P. Keyser, Supt.

Subject Necessity of having ZOO KEEPERS position set up under Civil Service

Dear Mr. Keyser:

It is my opinion that the time has arrived to discuss with Commissioner Fred L. Peterson and the Civil Service Commission, the necessity of setting up a special Zoo Keeper's position and examination so that we can secure the proper type of men at the very first time the new examinations are given.

You will recall that I made this recommendation in my first report to the city dated March 28, 1942. A second request was made February 11, 1943 to the Bureau of Municipal Research and Service about the time the reclassification studies were being made. As a result of this reclassification study my status was changed from that of Zoo Keeper to Zoo Director and that of Mr. George Searles was changed from Foreman to Zoo Foreman. The status of the other men working at the zoo was changed from that of Park Helper to Laborer.

It has been long recognized that civil service classifications and scale of salaries have been set up on the basis of skill and the nature of the work involved.

At the present time and, to the best of my knowledge, since the early history of the zoo for more than 65 years, there has been only one classification from which the zoo has received the majority of its help--namely the Park Helper--now called Laborer. In so far as the zoo is concerned, it has been a question of fitting square pegs into round holes.

When the Laborer examination is given no mention has been, is or will be made to the applicant that zoo work may be involved. This is the group from which we must secure our help!

In the past, whenever a worker was needed to work with lions, tigers, bears, monkeys, buffalo, alligators, poisonous snakes and the like, he was sent from some other park to the zoo. Most of the men realized that the work was dangerous. There has been a long record of injuries sustained by men who previously worked at the zoo. Therefore, in the majority of cases, he has come to the zoo reluctantly. Many have said that they didn't accept park work to work in the zoo. Besides--no mention of zoo work was made on the examination. If they refused to work at the zoo and said so--there was always the possibility of being charged with insubordination.

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As a result we have received loggers, golf course attendants, men expert at raking leaves, running lawn mowers, rest room attendants, and others who never wanted to work in a zoo. Some of these men were habitual drunkards--others were petty thieves. Many had no pride of cleanliness and the public called our attention to this fact.

Now this man (or men) must be "broken in" to the new type of work. A good animal man is a product of years of moulding and experience. It is not something that can be mastered in a short time. Frequently after our men were broken in--they were then removed from the zoo work at the onset of the park season to run power mowers. Fortunately, this practise was discontinued during the war since we never had a full staff.

Toward the end of the war, when labor was at a premium, we took on some temporary help. One is a discharged service man and most interested in zoo work. In a way we were fortunate since several of our temporary men "wanted to do only zoo work" and it is these men, who express a willingness, that we want. But now that their status is temporary--they will be forced to take the laborer's examination, and even if they pass, hope that they will be reassigned to the zoo. Then, only with the civil service status of laborer.

Recently, a trained zoo keeper wanted to work at the zoo. He refused to accept the temporary classification--not because of its temporary nature--but due to the fact that there is no zoo keeper's status nor any zoo keeper's examination to be given. He thought that he would be only one of many in what appeared to him to be a vast labor pool. In other words, zoo work at the Portland Zoo, to him, did not look sufficiently secure for him to chance the temporary status, the laborer's examination and the slim possibility of being reassigned to the zoo with the status of laborer.

Unless steps are taken the following will occur:-----
A laborer's examination will be held--with no mention of zoo work. Then it will be necessary to take men from the laborer's list. They may or may not want to work at the zoo. There is always the possibility that no one on this list would care to do zoo work. THEN WHAT?

Under the laborer's status, the chances are that practically no men of the right interests or ability suitable for zoo work--would be tempted to take such an examination since their status would be that of laborer no matter what type of work they would do.

On the other hand, if the examination is announced as for ZOO KEEPER, their status would be perfectly obvious to everyone and no explanations or apologies would need to be made. This would attract only men interested in work with animals, and the extent of their initial interest, knowledge, ability and experience would be shown on the examination.

A zoo keeper's job is utterly different from any other type of work--with its special hazards and dangers and therefore should warrant a special classification and pay.

Essentially, good zoo men should be most interested in the work, not be afraid to work with animals and display a willingness to learn. He must be alert and capable of thinking and acting quickly. A zoo

man not alert--is apt to be a dead zoo man before very long--or at least badly injured. It also requires that clear thinking men be always ready to safeguard the public--generally children. He should not be addicted to alcohol since liquor and animals do not mix. A man with alcohol on his breath is always noticed by the public and apt to reflect adversely on the administration. He therefore must be able to talk intelligently and present a good appearance to our visiting public.

Special abilities include the following:- He must be able to handle skillfully, nets, traps, ropes, snares and other highly specialized zoo equipment. He must be able to recognize any unusual animal action which may indicate that any animal is sick, injured, pregnant, about to give birth, or on the verge of wrecking the cage or enclosure and thus escape. Escapes can be extremely dangerous and result in the loss of life and limb. He should know the fundamental differences between the various branches of the animal kingdom, as for instance between mammals and birds. He must be able to care for and prepare food for his charges--under the supervision of the zoo director. If he has had special experience with elephants, camels, large cats, apes and monkeys, hoofed stock, birds, reptiles, etc.--all the better. These special abilities do not presuppose that he will be left entirely on his own. The Zoo Director or/and Zoo Foreman will always be on hand to supervise. However, it is essential for the Zoo Director to feel that he is surrounded by competent help to carry out the 24 hour a day work at the zoo.

It is also my opinion that work dealing with animals capable of thinking and killing should be compensated accordingly. There is little danger involved in raking leaves, picking up peanuts and cleaning out rest rooms. But there is a definite menace to a person who must get in and clean out a bear den with seven or eight live bears milling around--or to clean out a deer corral during the rutting season when buck deer have been known to charge and disembowel a man. Notice the attached photograph of the Lincoln Park Zoo Keeper who was killed by a bear. A Seattle zoo keeper was killed a short time afterward. And bear in mind that both of these keepers were trained men. Therefore all the more hazard to the men not trained.

Zoo work does not consist merely of cleaning out a cage once a day, throwing a chunk of meat to the lions and peanuts to the monkeys. A man must know the proper approach and handling of animals. He must have kind but firm authority and never resort to any method which may be considered inhumane. We have had men in the past who have taken out their dislike of the zoo work on the animals and have hit their charges with rubber hoses and iron pipes. While any trained zoo man respects the dangers involved in his daily routine--it is imperative that a zoo keeper never display any trace of fear in the presence of wild animals since the animals can detect fear and take immediate advantage of the situation. IT IS IMMORAL TO SUBJECT UNTRAINED MEN OR MEN WHO DISLIKE ZOO WORK TO THESE HAZARDS.

In 1943 the Zoo Director queried the major zoos of the country with regard to the keeper situation. The attached chart shows a summarization of those that answered. In most cases, those zoos run directly by the city, such as the Portland Zoo, have civil service

Mr. C. P. Keyser - 10/3/45

status. Privately owned or zoological society controlled zoos do not. In all cases there is a special zoo keeper's status as distinct from common laborers who also work in the zoo. In all cases the pay scale is higher for the zoo keeper than for the laborer.

To correctly accomplish the desired end of "getting the right type of man for the job required" there should be a special classification under civil service for zoo men working in the Portland Zoo--distinct and separate from "ordinary park laborers."

I am certain that this will be a benefit to the City of Portland and especially the zoo. It is essential for efficient zoo management. We are about ready to start on the new postwar zoological park and it would be folly not to staff it with the proper type of help from the very start to maintain the city's investment.

One reason given for not having set up a special zoo keeper's status before, has been, I understand, that there is not a sufficient number of men involved to warrant the move.

There are numerous individual positions in civil service at present calling for a single examination and status. That of Zoo Director is just one example. There are other positions filled only by a few men--much less than our present zoo staff.

It does not seem logical to me, that the number of men involved should be important since the requirements needed would be the same for 8 (our present number of laborers called for), 16, 32 or 64. If the move is eventually contemplated (and I am assured that it is and must be)--why not do it now so that the proper type of help can be secured from the moment the new examinations are given? Our staff will increase as our collections grow. By making the move now it will save confusion later on, when we will need trained men to staff the new zoo. How much better to be ready with our civil service list of qualified zoo men, from which to draw.

It is even more important to have the proper type of personnel on the zoo staff while we are on our present site where conditions are everywhere inadequate and hazardous that it will be in the new zoo where every possible physical precaution will be taken to protect the men, animals and the visitors.

Respectfully yours,

Arthur M. Greenhall
Arthur M. Greenhall, Director
Portland Zoological Park

cc to Fred L. Peterson, Commissioner
Department of Finance

ZOO KEEPER'S STATUS IN THE MAJOR ZOOS OF THE UNITED STATES

NAME OF ZOO	UNDER CIVIL SERVICE?	SPECIAL KEEPER'S STATUS?	WHAT SPECIAL TITLES?	HELP OTHER THAN KEEPERS? ***	SPECIAL HIGHER PAY FOR ZOO KEEPERS?
Buffalo, N.Y.	Yes	Yes	Keeper	Laborer	Yes
Chicago(Brookfield)	No	Yes	Keeper	Laborer	Yes
Chicago(Lincoln Pk.)	Yes	Yes	Keeper	Laborer	Yes
Cincinnati, O.	No	Yes	Keeper	Laborer	Yes
Cleveland, O.	No	Yes	Keeper	Laborer	Yes
Detroit, Mich.	Yes	Yes	Keeper	Laborer	Yes
Memphis, Tenn.	No	Yes	Keeper	Laborer	Yes
Milwaukee, Wis.	Yes	Yes	Attendant	Laborer	Yes
National, D.C.	Yes	Yes	Keeper	Laborer	Yes
N.Y.C. Bronx	No	Yes	Keeper	Laborer	Yes
N.Y.C. Central	Yes	Yes	Keeper	Laborer	Yes
N.Y.C. Prospect	Yes	Yes	Keeper	Laborer	Yes
N.Y.C. S. Is.	No	Yes	Keeper	Laborer	Yes
Philadelphia	No	Yes	Keeper	Laborer	Yes
<u>PORTLAND, ORE.</u>	<u>YES</u>	<u>NO</u>	<u>L A B O R E R</u>		<u>NO</u>
St. Louis, Mo.	No	Yes	Keeper	Laborer	Yes
San Francisco	Yes	Yes	Keeper	Laborer	Yes
Seattle, Wash.	Yes	Yes	Keeper	Laborer	Yes
Toledo, O.	Yes	Yes	Keeper	Laborer	Yes

*** This does not include positions of Director, Head Keeper or Foreman and Curator.

Several zoos have different grades of keepers such as junior, senior, trainers, etc. The pay scale is different for these grades.

Detailed information can be obtained from Arthur M. Greenhall, Director, Portland Zoological Park. This data is based on information received February 1943

PHOTOGRAPH OF LINCOLN PARK ZOO KEEPER
WHO WAS BITTEN AND SEVERELY CLAWED BY
A FEMALE TIBETAN BEAR. 7/30/45
THIS MAN DIED THE NEXT DAY!