DESIGNASAURUS RESEARCH FOUNDATION
123 HAWKING DRIVE SCIENCETOWN • UNITED NATIONS

1 June, 2501

Merle Conover
Executive Director

TO ALL DESIGNASAURUS SCIENTISTS:

Information crucial to the Foundation's work is missing! Sixteen geneprints--"blueprints" to the Foundation's prized Gigantodon--have vanished. The renegade scientist, Dr. Max von Fusion, stole the Gigantodon prints and scattered them in several geological environments. I implore each and every adventurer to help us recover these vital elements of the Gigantodon. Your efforts will not go unrewarded.

Dr. von Fusion came to us from the Berne Bio-Paleontologic Institute in Europe. At first, Dr. von Fusion's efforts were of great value to the Foundation. He began an exhaustive analysis of the Sauropods--some of the largest animals known.

Eventually, Dr. von Fusion's appetite for Sauropod research outstripped the Foundation's ability to fund him. He grew increasingly bitter at the lack of funds awarded to his department. One night, Max entered the laboratory using his personal entry code. He gathered all the Gigantodon geneprints, and placed them in the Time Room. The elements of the Gigantodon were teleported to various geological time periods, and scattered. among diverse terrains.

We know this because of a single postcard sent by the departed Max from a jungle outpost in Brazil. "Gigantodon geneprints visiting Jurassic and Triassic destinations," he wrote. "Geneprints on permanent sabbatical from Designasaurus Research Foundation. So am I." Aside from a clue-strewn poem (see the end of this letter), this is all the errant Max has left us.

It is vital to the Foundation that Designasaurus volunteers assist us in the recovery of Gigantodon's geneprints. Adventurers will explore sixteen time periods and climates, using their dinosaurs to recover the individual parts of Gigantodon.

The dinosaur that you employ in pursuit of the geneprints will encounter a variety of climates along the way. Find each geneprint, then teleport to the next climate or era. I have received approval from the Foundation's Executive Committee for the distribution of research grants to willing scientists. There are five grants in all.

The grants and the terms of their release are as follows:

Grant One: When your dinosaur locates the first geneprint, you will receive a grant of one million credits.

Grant Two: Upon retrieval of the geneprint hidden in the second "world," two million credits are awarded.

Grant Three: Four million credits come your way when you find the missing prints and finish the fourth world.

Grant Four: When you complete your work in the sixth world, you receive a grant of six million credits.

Grant Five: The ultimate honor for a scientist in the Designasaurus Adventure. Retrieve the final piece of the Gigantodon geneprint and complete your task. Your reward: ten million credits and promotion to Chief Scientist.

I have requested a committee of experts to brief Adventure volunteers. Refer to "Geological Time Periods" and "Climates", in the Designasaurus II Lab Manual for a review of their findings.

We are left with the consequences of one man's genius gone awry: a taunting poem of scattered clues to the whereabouts of the geneprints:

Greetings to the Foundation
from Dr. Max von Fusion;
may wayward pieces of missing geneprints
cause maximum confusion.

Gigantodon has wandered to points unknown;
pieces on Pangaea, perhaps hidden in trees;
remnants of Conover's creation nestle
in shallow Jurassic seas.

Plans mislaid often reappear,
on high mountains, in a distant year.
Where Archaeopteryx soars and Allosaurus roars,
where Pterosaur lurks and Ichthyosaur spear,
in search of Gigantodon, the Foundation's minions fear.

On the warm, wet Cretaceous plains
the conifer limbs did Iguanodon brush;
where their huge hind feet splay,
elements of a geneprint are sadly crushed.

Among the cycads and ferns.
along the shore of sweetwater lakes,
the Proterosuchus lurks in ambush,
for the dinosaur eager, his thirst to slake.

It is with the greatest urgency that I call upon all brave scientists to recover the missing Gigantodon geneprints, and bring this enterprise to a successful conclusion. The grants are waiting.

Yours in Exploration/

Merle Conover

Dr. Merle Conover
Executive Director

A Note to Parents:

Our program, Designasaurus II reflects the latest paleontological information and theories about prehistoric life. In fact, We've consulted with a top paleontologist, Peter Rodda, Ph.D., to help ensure ***Designasaurus II*** is as accurate as possible, within the limitations of a ***computer*** program.

Since the discovery of dinosaurs, there has been much controversy and debate about the life and times of the behemoths of long ago. For the purposes of *Designasaurus* II, it was necessary to Speculate at some of the information, such as dinosaur color and behavior. Some liberties have been taken with some facts to provide a stimulating simulation. And of course, the genetically-altered "custom" dinosaurs are based purely on imagination.

Children have a special affinity for dinosaurs. Designasaurus II can help stimulate your child's scientific interest, creativity and curiosity about the world around them. We hope that you and your children enjoy our vision of the fabulous creatures that once ruled the earth...

Programming
Scott L. Patterson

Artwork
Bill Stanton

Design
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Executive Producer
Gregory A. Thomas

Consulting Paleontologist
Peter V. Rodda. Ph.D.

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Lisa Lee

Lab Manual
Larry Hall

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GIGANTODON GENEPRINTS RECOVERED!

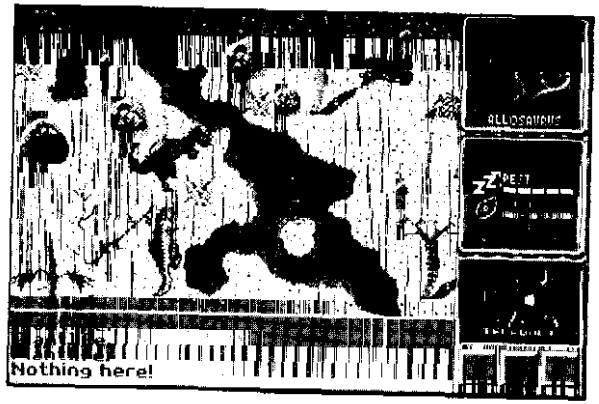
June 7, 2501–Yesterday, an extraordinary story reached its conclusion in the halls of the Designasaurus Research Foundation. A young scientist, Sam Kinley, completed the recovery of sixteen missing geneprints of the invaluable Foundation creation—the Gigantodon. With the return of Gigantodon's geneprints, the Foundation is sure to continue its giant strides in dinosaur research. Dr. Kinley was the first of many volunteers to put the pieces of the puzzle together.

SCIENTIST LOCATES GENEPRINTS; GIGANTODON ASSEMBLED SUCCESSFULLY!

The parts of the super-dinosaur had been scattered throughout geological time, strewn among swamps, plains, lava fields and deserts. The renegade scientist, Dr. Max von Fusion, had carried out this scientific sabotage in a fit of anger. Von Fusion had resolved to end the Foundation's good work forever.

Dr. Merle Conover will present the title of the Designasaurus Research Foundation's Chief Scientist to Dr. Kinley today in a special ceremony in the Foundation's Reception Room.

–San Francisco Courier



ABOUT DESIGNASAURUS II In the World of Dinosaurs

Designasaurus II recreates the world of the dinosaurs: the steamy swamps, arid plains, shallow seas and lava flows, reflecting the era **in** which dinosaurs lived. Enroll as a scientist to conduct research on these ancient creatures and their environments. Choose a dinosaur to **create** and teleport into one of seven time periods, then guide the dinosaur through varied terrain and climates in a struggle for survival.

Use the Study Guide to explore individual time periods. When you want to Pursue a full-fledged set of objectives, enroll in the Adventure, Travel with your dinosaur through multiple time periods and climates, collecting missing geneprints of the Designasaurus Research Foundation's Gigantodon. Receive grants for successful adventuring.

Whether you choose the Study Guide or the Adventure, the rules of the game are about the same. Your dinosaur begins in full health, searching for food and water, and using his energy stores to the best advantage. When the dinosaur meets hostile dinosaurs, he must often fight to survive. Sometimes, the dinosaur has happy encounters with other creatures. Then, fertilization occurs, baby dinosaurs are born, and the next generation sets foot into the prehistoric world.

When the effort to explore taxes him, your dinosaur can rest. Sleep replenishes his body, and prepares him for further adventure. Should your dinosaur lose precious health points, he's teleported to the safety of the Time Room. Then, it's back to prehistoric times to try again.

You can also create dinosaurs from the parts of real creatures, Print dinosaurs in a variety of formats. Let your imagination run riot. Whether you choose to go to the Early Jurassic or Late Cretaceous, you're bound to enjoy the trip!

Getting Started

In this section, we explain the things you need to do to get started, such as hard disk installation and disk backup.

system Requirements

You can run Designasaurus ll on an IBM PC XT, AT, or compatible machine with at least 512K memory-and on Tandy series 1000 and 2500 XL computers. Your computer should have a EGA, VGA or TGA card and a compatible video display.

If your computer system includes a hard disk, read the Hard Disk Installation section below. If you plan to run the program from floppy disks, skip to the Disk Backup section next.

To print dinosaurs, you need a printer which is in one of the following categories:

Epson FX or **MX** series
IBM Proprinter series
Okidata series
Tandy DMP series
HP LaserJet series

Hard Disk Installation

If your system has a hard disk, follow these steps to install Designasaurus II. It is faster to run the program from a hard disk than from floppy disks.

To place Designasaurus ll on your hard disk:

1. Turn on your computer and monitor.
2. Insert Disk 1 into Drive A.
3. At the A prompt, type **Install.**
4. The program creates a "Dino" directory in the C directory on your hard disk. Follow the on-screen instructions, exchanging disks as needed.
5. A message lets you know when the installation is complete. Remove your last program disk, and read the next section on making backups of your Designasaurus ll disks.

Disk Backup

Designasaurus II comes with four 5.25" and two 3.5" disks. We recommend that you backup your original program disks to prevent the effects of accidents and natural disasters, such as spilled liquids and meteor impacts. Prepare four blank, formatted disks to use as your backup disks (3.5" users need only 2 disks). Label them **Designasaurus Disks** 1, 2, 3 and 4.

To backup your *Designasaurus* II disks, place the original Disk 1 into Drive A and your first blank, formatted disk in Drive B. Now follow the DISKCOPY instructions in your DOS manual for each disk to be copied.

When you are done, store your original disks in a safe place; if you are running the game from floppy disks, use your backup disks to play the game.

Playing Designasaurus II

Once you've completed installation (hard disk owners only) and backup (all Designasaurus scientists), you are ready to begin play.

Starting from a Hard Disk

If you have placed the program onto your hard disk, follow these steps to start *Designasaurus II:*

1. Turn on your computer and monitor.
2. At the C prompt, type **CD\Dino** and press **Enter.**
3. Type **Dino** and press **Enter.**
4. Watch as the title screen and credits are displayed: press any key to continue.
5. When the Designasaurus Identification Exam appears, locate the code wheel supplied with the game and follow these steps:

- Look at the picture of the dinosaur on the screen, and find the same picture on the outside edge of your code wheel.
- Now, read the dinosaur's name on the screen, and find the name on the inner ring of the wheel.
- Rotate the wheel so the dinosaur's name is aligned under the picture.
- Look in the cut-out window beneath the dinosaur's name, and type the four-digit number that appears there. Press **Enter.**

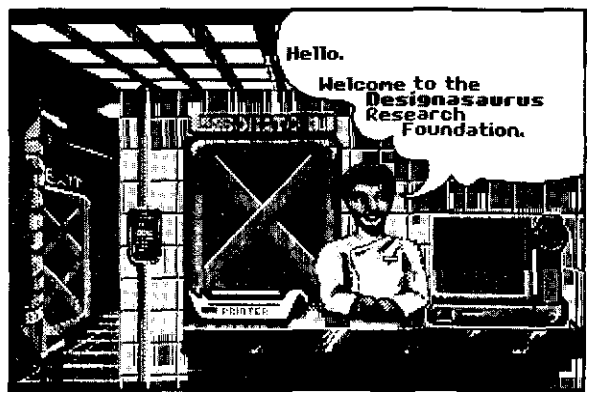
You get three tries to answer the Designasaurus Identification Exam correctly.

6. Welcome to the Reception Room! Select the Computer to sign in.

Starting From Floppy Disks

If you plan to run the program from floppy disks, follow these steps to start Designasaurus II:

1. Turn on your computer and monitor.
2. Place Disk 1 in Drive A.
3. At the A prompt, type **Dino** and press **Enter.**
4. Watch the title screen and credits. Press any key to continue.
5. Answer the Designasaurus Identification Exam (see Step 5: Starting from a Hard Disk above).
6. Welcome to the Reception Room! Select the **Computer** to sign in.



A Tour of the Reception Room

Your first stop after passing the Identification Exam is the Reception Room. This is the Designasaurus nerve center: a smiling receptionist welcomes you. Highlight the Laboratory and **Printer** to read descriptions of each, then highlight and select the **Computer** to sign in.

You must sign in before you can enter the Laboratory.

The Reception Room is also your exit point: just highlight and select the **Exit** door. Select the **Power Switch** or the **Exit Door** to return to the previous screen.

It's time to sign in, select and create dinosaurs, and explore the time periods and climates that made up the world of the dinosaurs.

Keyboard Controls

You can use just the keyboard to play *Designasaurus II*. The following is a list of keys and their functions. See the Exploration Mode section to learn how to control dinosaur actions using the keyboard.

Enter	Select a highlighted icon.
Space Bar	Hide menu icons or display hidden icons.
S	Toggle sound off and on.
left/Right Arrows	Move the highlight bar between icons.

Joystick Controls

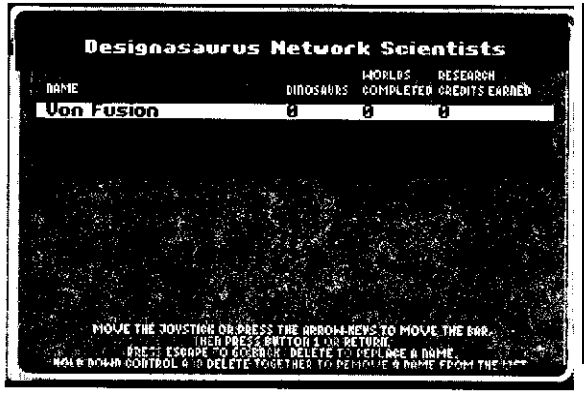
Use your joystick and the two joystick buttons to issue commands. Refer to the Keyboard Controls section above for commands you might want to issue via the keyboard. See the Exploration Mode section to learn how to control dinosaur movement using the joystick.

Forward/Back	Move the highlight bar between menu icons.
Button 1	Select a highlighted option.
Button 2	Hide or display icons.

The Designasaurus Network Computer

Select the Designasaurus Network Computer to sign in for play, to review research grants awarded to adventurers, and to continue saved games. Select the **Power Switch** when you want to return to the Reception Room.

To sign in, highlight and select the log at screen left. The Designasaurus Network Scientists log appears.



The Network Scientists Log

The Designasaurus Network Scientists log lists current scientists and their records. These records are:

Geneprints Collected	This is a record of the geneprints a scientist has collected in the Adventure.
Research Credits Earned	Displays credits gained from completing levels in the Adventure.
Number of Dinosaurs	Shows the number of dinosaurs a scientist has used in the Study Guide.

Sign up as a New Scientist

To enter a new scientist into the log, follow these steps:

1. At the Designasaurus Network Scientists log, move the highlight bar to the first blank line and press **Enter.**

2. Type the new scientist name, and press Enter.
3. Select the Power Switch and press Enter to return to the Reception Room.

Log in as a Current scientist

To continue the research of an existing scientist, select the Log and follow these steps:

1. When the Designasaurus Network Scientists screen appears, move the highlight bar to the name of the scientist whose research you wish to continue.
2. Press Enter.
3. Select the Power Switch and press Enter to return to the Reception Room.

Replacing and Deleting a Scientist

You may want to replace a scientist or even delete an entire record. In either case, select the Log at the Network Computer to first display the Designasaurus Network Scientists.

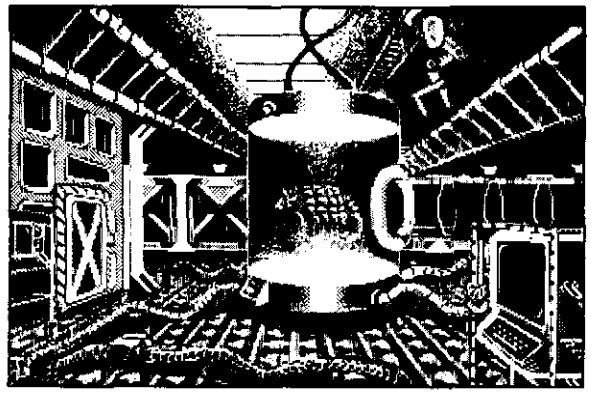
To replace a current scientist, highlight the name to be replaced and press Delete. Now, type a new name in that space and press Enter.

To delete a name, highlight it, then press Ctrl and Delete. The scientist's research is now completely removed from the log.

Continuing a Saved Game

You can continue saved games once you've signed up as a scientist. To continue a saved game:

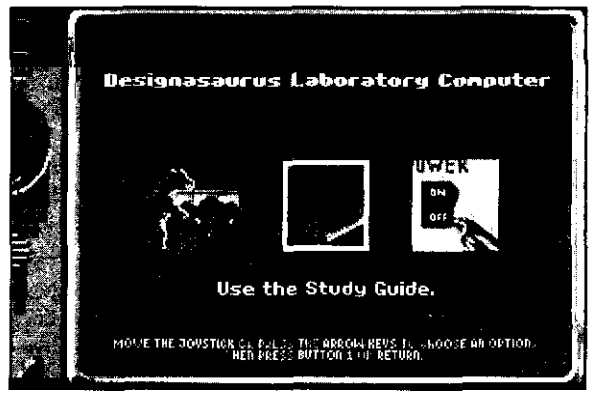
1. Select the Computer in the Reception Room.
2. At the Designasaurus Network, highlight and select the Retake icon (showing a dinosaur hard at work on a movie set).
3. View the roster of saved games, then highlight and select the one you want to resume. Press Enter.



The Laboratory

Select the laboratory door to enter the World of Science and begin your research. In the laboratory, you will reconstruct extinct dinosaurs, create original dinosaurs, explore the past, and attempt to recover the missing Gigantadon geneprints.

Once you are in the lab, select the Designasaurus Laboratory Computer to get down to work. When you have finished in the computer, select the Power Switch to turn it off.



Using the Study Guide

The Designasaurus Study Guide is an active tutorial. Use the Study Guide to select or create dinosaurs, select time periods and climates, and guide your dinosaur on a tour of exploration and survival.

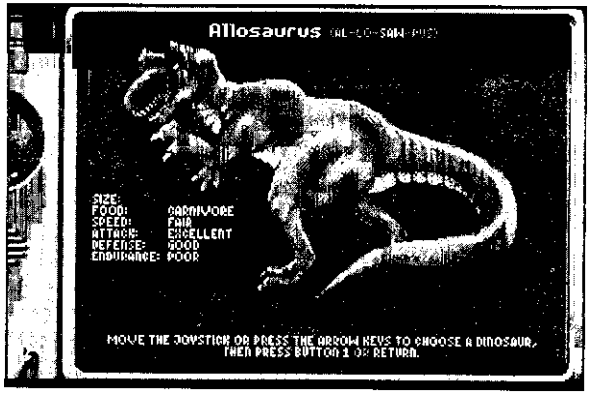
To use the Study Guide:

1. Highlight and select the laboratory **Computer.**
2. Highlight and select the **Study Guide** in the center of the Laboratory Computer screen.
3. Now select an alreadyexisting dinosaur, or create one of your own from the parts of real dinosaurs!

Selecting an Existing Dinosaur

Select existing dinosaurs for exploration the first few times you use the Study Guide. This will acquaint you with the roster of dinosaurs, and lets you quickly enter the Exploration Mode.

To select a dinosaur:



1. Select the **Dinosaur** from the Study Guide menu.
2. An Allosaurus appears, together with a set of attributes: size. what it fed on, its speed, manner of attack and defense, and endurance.

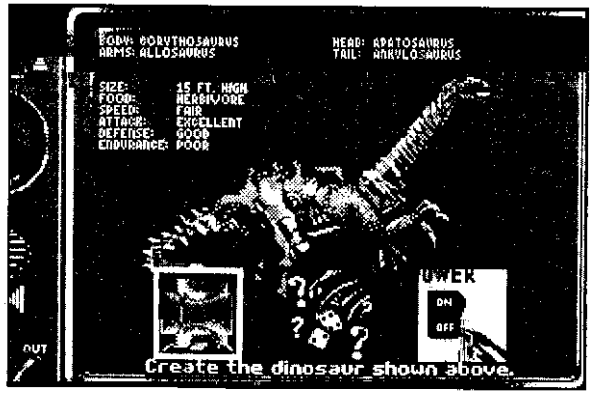
Whether selecting existing dinosaurs or those you've created, follow these steps to view all dinosaurs:

- **Press the Space Bar or Button 2 to toggle the kons off.**
- **Use the arrow keys or joystick to scroll through the pictures of additional dinosaurs.**
- **To reconstruct a dinosaur. press the Space Bar or Button 2 to display the icons once more.**

3. Select the **Creation Chamber** at screen left to use the Allosaurus, or highlight and select the **Disk** icon to select a dinosaur you've previously created.

Now select the **Creation Chamber** icon.

4. The Computer references the DNA data banks, then reconstructs the selected dinosaur in the Creation Chamber and sends the embryonic dinosaur into the Time Room.
5. When the Time Room appears, select the **Time Computer** at screen right to choose a time period and climate (see Selecting a Time Period).



Creating Your Own Dinosaur

Besides reconstructing existing dinosaurs, you can create strange and wonderful dinosaurs of your own.

To create your own dinosaur:

1. At the Designasaurus Study Guide screen, select the Egg icon.
2. To create your own dinosaur from a random combination of parts, highlight and select the Dice icon.
3. The first "trial" dinosaur appears, assembled from the four body parts of different dinosaurs.
4. Press the **Space Bar** to hide the menu icons. Press the arrow keys or move the joystick to scroll through the available body parts, and press **Enter** to select one you like.

5. Repeat the process to complete your creation with the head, body, arms and tail. When you see a combination suited to your new dinosaur, press the **Space Bar** to recover the menu icons, and select the **Creation Chamber** icon at screen left.
6. Enter your dinosaur's name when prompted to do so. Press **Enter.**
7. The dinosaur's genetic material is analyzed and the Creation Chamber is prepared. Your creation is passed into the Time Room. Select the **Time Computer** to continue.

Read **Dinosaur Descriptions** for details on the characteristics and habits of the dinosaurs available for creation.

Selecting a Time Period

After creating a dinosaur, you must select a time period to which the dinosaur is teleported.

To select a period:

1. In the Time Room, select the **Computer** icon.
2. View the Select the Period screen. Use the arrow keys or joystick to view the available time periods. Each is described on screen.
3. When the period you want is displayed, select it.

Read **Geological Time Periods** for details on the characteristics of the time periods available for selection.

Selecting a Climate

Once you select a time period, choose a climate for it. Different time periods had different kinds of climates.

To select a climate:

1. When the "Select a Climate" message appears, scroll through the available climates.
2. Select the one you want to apply to the designated period. Your selected dinosaur is now teleported to the appropriate period and climate.

Read **Climates** for details on the characteristics of the various climates available for selection.

Exploration Mode

In the Exploration Mode, your dinosaur explores varied terrain, encounters other dinosaurs, eats, drinks and sleeps-and engages in the ongoing struggle for survival.

The Exploration Window is where your selected dinosaur explores his world. Any time a dinosaur teleports to his world, you start in Exploration Mode.

Beneath the Exploration Window, a Message Window provides current information on the dinosaur's present activities and surroundings. For instance, when your dinosaur mates, a message instructs the new parent to defend the eggs. Monitor the Message Window to get information helpful to your dinosaur's survival.

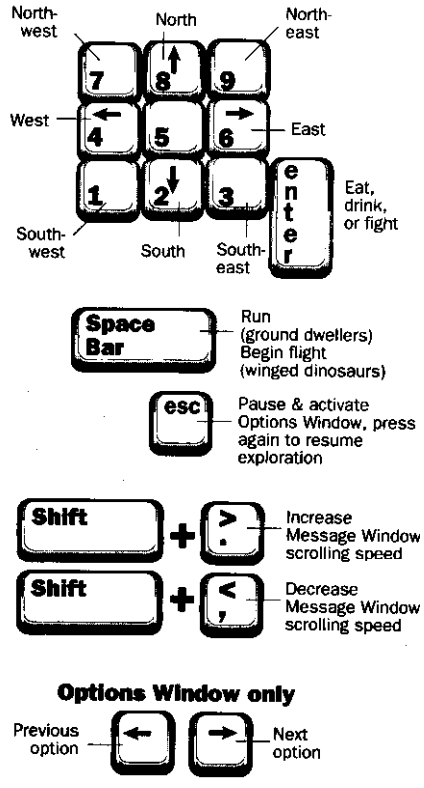
Status Windows at screen right let you view your dinosaur, and monitor its overall health, food, water and rest statistics. During certain activities such as combat, dinosaur statistics are temporarily cleared from view. Once the combat is concluded, the statistics return. Beneath the three Statistics Windows is the Options Window (see The Options Window section for more on the Exploration Mode options).

As your dinosaur explores his environment, certain discoveries may result In distinguished science awards!

Exploration Mode Controls

Use the following keyboard and joystick information while in Exploration Mode:

Keyboard Controls



Joystick Controls

Any of eight **directions**	Move dinosaur in desired direction.
Button 1	Initiate eating, drinking or fighting (when adjacent to enemy dinosaur).
Button 2	Increase dinosaur speed. Begin flight (winged dinosaurs).

The Options Window

The Options Window lets you select one of several game options. When you activate the Options Window, the finger is over the "OK" button. The **Teleport** icon is displayed.

To view another option, use the arrow keys to move the finger to one of the buttons on the screen, then press **Enter** or **Button 1** to view the next or previous option. To select an option, move the finger to the "OK" button, and select it as you would any menu item.

The five options are:

Teleport	Select to teleport your dinosaur back to the Time Room.
See **Dinosaur**	Select to view your dinosaur.
See **World**	Select to view the selected world.
Load/Save	Choose to save a current game or load a previously saved game.
Sleep	Select to begin dinosaur rest.

Whenever you wish to return to the Time Room, activate the Options Window and select Teleport. To return to Exploration Mode, select the Time Computer Icon and begin a new teleport to the selected time period and climate.

Eating and Drinking

As your dinosaur explores his environment, he needs to eat and drink periodically. Though each dinosaur has different Food and Endurance attributes, all need nourishment. Monitor the Food and Water bars in the Statistics Window to keep on top of your dinosaur's "fuel" needs.

To have the dinosaur eat, just press **Enter or Button 1** when the creature is near a food **source. Press Enter** or **Button 1**to initiate drinking when the dinosaur has approached a source of water.

Fightlng

From time to time, your dinosaur engages in combat with a foe. To initiate combat, approach an enemy dinosaur, and press **Enter or Button 1.** If an enemy attacks, combat ensues automatically. Fighting ends when one party is killed, or withdraws from the battle.

Your dinosaur's combat performance depends on his own Attack and Defense capability-as well as the ferocity of his opponent. Fighting usually lowers the dinosaur's Health rating, so monitor it carefully. Head away from contact with other creatures if your dinosaur is weak.

Reproduction

Reproduction is an instinctual drive which dinosaurs naturally pursued. Successful reproduction in Designasaurus II is a threepart operation:

Courting Another dinosaur of the same species indicates an interest in reproducing with your dinosaur.

Birth A nest appears, full of eggs. Your dinosaur must fend off any dinosaurs that attack the nest.

Hatching The dinosaur babies are born. The adult dinosaur must acquire food and feed the infants. (Doing so decreases the adult's Food rating.) When the babies are old enough, they leave the nest. Reproduction is concluded.

Resting

Dinosaurs lead an active life, and will want to rest occasionally. To see when sleep is necessary, view the Rest bar in the Statistics Window.

When it's time for your dinosaur to rest:

1. Press **Esc** to pause the action and activate the Options Window.
2. Scroll through the game options until **Sleep** is visible.
3. Move the finger to **OK** and select it. The dinosaur sleeps an appropriate time.
4. Press **Esc** to resume exploration.

Though sleep restores **the dinosaur's Rest rating, be** Careful **where he's located when choosing Sleep. If the** creature Is exposed, other **dinosaurs may attack him while he rests, causing serious damage.**

Herding

In dinosaur times, many creatures were social animals (just as humans are today). Herds of some species of dinosaurs roamed alluvial plains, browsed in the high branches of palms and ferns, and protected each other from the attacks of other creatures.

As your dinosaur explores his world, he may encounter roving herds of Sauropods or Hadrosaurs. The herds will probably not harm your dinosaur unless provoked.

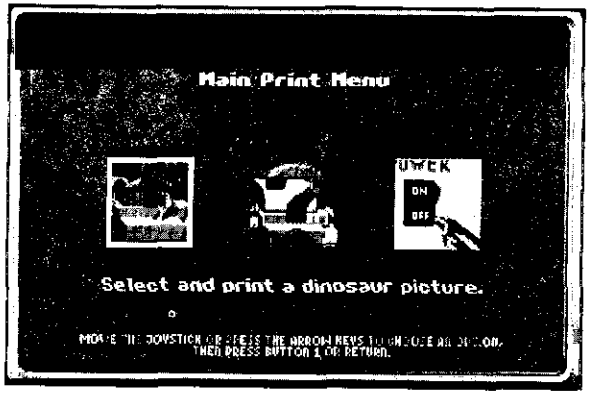
The Adventure

Play the Adventure to help the Designasaurus Research Foundation recover the essential geneprints for Gigantodon, the super-dinosaur created by the Foundation's scientists. Sadly, the mad scientist Max von Fusion scattered the pieces of Gigantodon's geneprint in a number of distant worlds. In the Adventure, it's your job to guide your selected dinosaur through the various environments and recover the geneprints.

During the Adventure, your dinosaur is teleported to a pre historic time period. Once your dinosaur has found the geneprint, he must return to the Teleporter where he will be conveyed to another world.

To start the Adventure:

1. From the Reception Room, enter the Laboratory.
2. Select the Designasaurus Laboratory Compute, and select the **Dinosaur** icon ("Play the Adventure").
3. Read the urgent message from the Foundation's Executive Committee.
4. When the Designasaurus Adventure menu appears, choose to select an already-created dinosaur, or create your own.
5. The dinosaur is reconstructed and teleported to the first time period in the Adventure.



The Printer

Printing dinosaurs is another fun feature of Designasaurus II. You will find the Printer in the Reception Room. Select it to see the main print menu.

The three print icons are:

Print Dinosaurs	Select to print an existing dinosaur.
Printer Selection	Select to designate your printer type (select this icon the first time you use the Printer).
Power Switch	Returns you to the Reception Room.

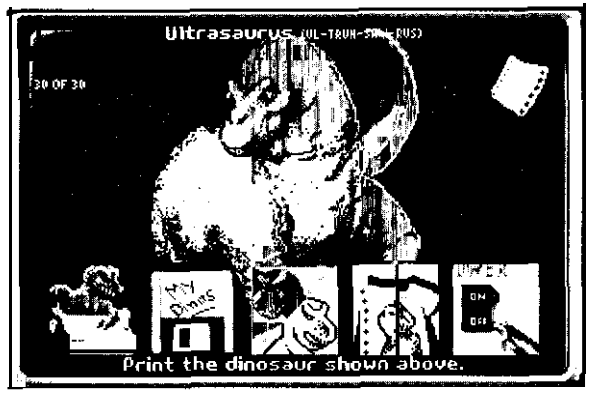
Selecting a Printer Type

Designate your printer type the first time you use the Printer. To set your printer type:

1. Highlight and select the middle icon from the main Print menu.
2. Move the highlight bar to the printer series which describes your printer. Press **Enter** to select the appropriate series and return to the main Print menu.

Printing a Dinosaur Picture

Once you have set your printer type, you are ready to print a dinosaur picture.



Select the **Print a Dinosaur** icon.

2. Choose whether you want to print a real dinosaur or one you've made in the lab by selecting the first or second icon at the left of the screen. Press **Enter.**
3. Press the **Space Bar** to hide the menu icons and use the arrow keys to scroll through the available dinosaurs. When you find the one you want to print, press the **Space Bar** once more to recall the menu icons.

4. To print a real dinosaur, you have two more choices to make:
   - Highlight the third icon from the left: the **Shaded/Outline** icon. Press **Enter** to toggle between the two settings. Print the dinosaur using **Outline** when you want to color the printed dinosaur.
   - Use the arrow keys to move the highlight to the **Paper/Transfer** icon. As you press **Enter,** look at the icon at the top of the screen. Select the T-shirt icon to print a mirror image of the dinosaur. Select the Paper icon if you want a standard print-out.
5. To print your own creation, decide whether to print a regular picture or a transfer image. Select the **Paper/Transfer** icon and press **Enter** to toggle between the two settings.
6. Use the arrow keys to move the highlight to the **Print a Dinosaur** icon once again and press **Enter.** Read the on-screen message and press **Enter** to print.

Customer Service

Having trouble with your *Designasaurus* II program? If you have any questions that are not answered in this lab manual, call Britannica Software, Monday through Friday, 9 a.m. to 5 p.m. (Pacific time) at (415) 597-5555. Our Customer Service Representatives and Support Technicians will be glad to help you get the most from your Britannica Software program!

Britannica Software, Inc.
345 Fourth Street
San Francisco, CA 94107

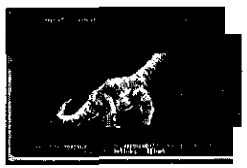
DINOSAUR DESCRIPTIONS

Ankylosaurus

A low-slung, armored dinosaur with a heavy frame. Twice as heavy as Stegosaurus, Ankylosaurus was shielded by flat armor plates and a tail capped by a bony club. The Ankylosaur was extinct by the end of the Cretaceous Period.

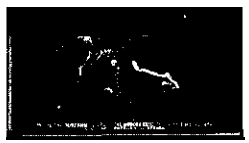
Allosaurus

A carnosaur whose name means "flying reptile," the Allosaurus lived during the Late Jurassic Period. These monsters had blade-like fangs and forelimbs with three long digits; each digit ended in a ferocious claw. The Allosaurus' head was so large that "windows" in its skull lightened an otherwise top-heavy load. Attacking with jaws and claws, this carnivore wreaked havoc among its prey, including the peaceful Sauropods.



Apatosaurus

This giant Sauropod is also known as "Brontosaurus" (Thunder Lizard). Up to 80 feet in length, the Apatosaurus weighed more than 30 tons—five times the size of a modem-day elephant. Apatosaurus had an ingenious backbone structure which contained hollow spaces to lighten the load. The gentle creature had a miniature brain no bigger than a kitten's: despite this, the species survived into the Mesozoic Period. Apatosaurus' peak population thrived during the Jurassic Period.



Deinonychus

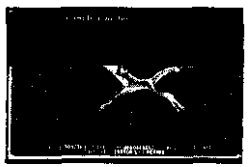
A relatively tiny dinosaur, little more than eight feet long, with an amazing tail which ensured dynamic stability during combat. Deinonychus had a sickle-shaped claw which it used to gouge and tear at prey. Fleet of foot, the small carnivore was among the most lethal of the meateating dinosaurs.

Iguanodon

A very large (26-foot long), herbivorous biped of the early Cretaceous Period, the Iguanodon defended itself against predatory carnosaurs with its huge, spiked thumb. Stabbing an attacker in the eye was probably a prime method of defense. Iguanodons roamed the African plains and as far north as the Arctic. Its amazing, grinding teeth made Iguanodon a plant-devouring machine.

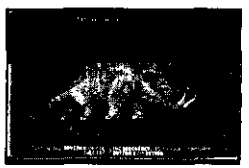
Pteranodon

A great, gliding dinosaur, Pteranodon means "winged and toothless." With a wingspan of 24 feet, the weak-muscled Pteranodon relied on the winds to help it take off-and its webbed wings to maintain a gliding flight.



Ramphorynchus

A winged dinosaur dating to the Jurassic Period. With its short broad wings, Ramphorynchus looked like a long-tailed crow. An enormous finger supported each wing: the remaining Ramphorynchus fingers were clawed. Ramphorynchus used its tail as a rudder to steer through the prehistoric skies.



Stegosaurus

This largest of the stegosaur family populated North America during the Jurassic Period. Carrying two rows of triangular bony plates on its spine, Stegosaurus also had twin bony spikes protruding from its sizable tail. This great herbivore bore most of its weight upon the hind limbs, and used its massive tail to prop up its body while rearing. In addition to a walnut-sized brain, Stegosaurus possessed a giant nerve ganglion which regulated the supply of energy to its big back legs.

Triceratops

Triceratops was the last and largest of the ceratopsian class of dinosaurs. Triceratops ("three-horned face") was approximately 24 feet long, with the profile of a huge rhino! It had 3-foot horns protruding from each brow. Evidence of Triceratops' crashing charges is found in the healed head and neck fractures of discovered. fossils. An adaptive creature, Triceratops survived when the climate began to cool.

Tyrannosaurus

The heavyweight of the carnivorous dinosaurs, Tyrannosaurus could grow to 50 feet in length and 20 feet in height. This species made its entry into dinosaur history in the Cretaceous Period. With teeth like daggers and a giant tail to balance its enormous weight, Rex undoubtedly struck terror in the hearts of all other creatures. Tyrannosaurus used its heavy tail to balance its four-ton weight, and its tiny forearms to help balance the huge head when rising from a prone position.

Late Triassic

Approximately 215 million years ago. A single supercontinent, ***Pangaea.*** existed. The first dinosaurs appeared: prototypes of the herbivores and carnivores of later times. A relatively small number of the creatures existed. The dominant climate was warm and dry, and volcanoes spewed fire onto the earth.

Early Jurassic

The Early Jurassic Period spanned 190 to 180 million years ago. The supercontinent, Pangaea, still existed. Most land climates were warm, dry and desert-like. Dinosaurs had become the dominant land animal. Sauropods, Heterodontosaurids and Dilophosaurs were plentiful.

Other reptiles, nocturnal mammals, amphibians and fish also existed. Conifers were the dominant plant type, though cycads, tree ferns, and horsetails were also found.

Middle Jurassic

About 160 million years ago. Shallow seas began to cover parts of the supercontinent Pangaea. Sauropods were in abundance. Many varieties of reptiles, fish and amphibians proliferated. Pangaea would soon break apart, as its northern part began to divide.

Late Jurassic

Roughly 145 million years ago. The North Atlantic had begun to open, splitting Pangaea. Shallow seas covered much of what is today Europe, and volcanoes erupted in western North and South America. Coral reefs were plentiful in Europe and North Africa. A seaway had formed in western North America, and many dinosaurs lived in the plains south of the huge channel.

The climate was warm by today's standards, though cooling had set in. Deserts still were plentiful.

There was a tremendous variety of dinosaurs, and a multitude of giant creatures. In particular, the Sauropods flourished. Stegosaurs and Allosaurs, Coelurosaurs and Archaeopteryx (the first bird) added to the dazzling array of dinosaurs.

Early Cretaceous

By the advent of the Cretaceous Period, Pangaea had yielded to the broad Atlantic. Antarctica, Australia and India formed a single land mass separated from the others. Along the west coast of North America, volcanoes still showed their primal fury. High mountains ridged the western American continent, and raised peaks in east Asia.

Most climates were now warm and wet; vast tropics and subtropics extended well to the north. Coral reefs flourished in many tropical regions. Modern trees began to appear in many areas, redwoods and cypress among them. The first flowering plants, shrublike in form, made an entrance.

A full range of dinosaur species roamed the earth. There were Iguanodons and Pachycephalosaurs, Stegosaurs. Nodosaurs, Ankylosaurs, Sauropods. Deinonychus and Spinosaurus. In the sea, Ichthyosaurus, Plesiosaurs, Mosasaurs. sharks and fish dwelled.

Middle Cretaceous

Ninety million years ago. Tropical and subtropical climates prevailed. A multitude of dinosaur species roamed the warm, wet world. Flowering plants spread across the emerging continents. Volcanic activity continued to spread.

Late Cretaceous

About 75 million years ago. The separation of the continents continued. India was now distinct from the Antarctic/Australian mass. Shallow seas covered the majority of the continents. A seaway ran from the Gulf of Mexico to the Arctic region. Volcanic activity was abundant: India, Indonesia and East Africa now hosted the spouting red mountains.

Climates had shifted from warm and humid to cooler, drier ranges. Marked climatic changes existed from region to region. The tropics receded towards the south, and glacial masses formed in the Arctic. A mixture of conifers, other types of trees and flowering plants grew; flowering plants became the dominant type of vegetation.

Dinosaurs continued to flourish. New types such as the fearsome Tyrannosaurus and the ostrich-like Omithomimosaurs appeared. Hadrosaurs were abundant, as were the Ceratopsians (Triceratops was one).

Birds appeared in large numbers. Pterosaurs boasted wingspans UP to 50 feet in length! Crocodiles, lizards, and the first snakes multiplied. Modern mammals such as marsupials and primates made their first showing, and pollinating insects arrived.

CLIMATES

Tropical

A warm, wet climate in which conifers, cycads and ferns are abundant. Swamps were common. Dinosaur types include Coelurosaurs in forests, Hadrosaurs in swamps and on open ground, Ceratopsian herds in the open, Archasopteryx and Pterosaurs in flight and trees, and crocodilians in swamps and lakes.

Desert

Hot and dry with sparse vegetation. In the Late Cretateous, some cactus-like plants and palms appear. Dinosaurs are few, consisting of armored types like Ankylosaurus, Sauropods, and small carnivores such as Theropods. Small animals like lizards and scorpions abound.

Oceans/Lakes

Conifers, cypress, cycads and gingkoes line the shores. Many dinosaurs are found, including Hadrosaurs, Ichthyosaurs, Plesiosaurs, and Mosasaurs.

Mountains

Conifer forests, cycads, ferns and gingkoes prevail. Dinosaurs are Coelosaurs, Hadrosaurs, Theropods, Heterodontosaurids, and Pterosaurs. Small animals are common.

Arctic

Tundra vegetation and conifer forests; migrating Hadrosaurs. and carnivores such as Albertosaurs and Dromasosaurs are found. There may be birds and burrowing animals, too.

Plains/Valleys

A fruitful environment for dinosaurs. Many conifers flourish, as do flowering plants. Sauropods, Hadrosaurs, Ceratopsians. Stegosaurs, Iguanodons and Tyrannosaurs wander in search of food. Armored dinosaurs forage.

Volcanic

A subset of other climates, volcanic terrain features lava, thick ash, and eruptions.

Varietal

A cross-section of all climates.

Addendum

In an effort to bring you the best program possible, the following changes were made after the manual went to press.

Optimizing Designasaurus II

1. When running *Designasaurus* II, you must use one floppy drive only.
2. If you have a 512K system:

- DOS 3.3: If the program issues a message that there is not enough memory or it is having trouble printing. check your AUTOEXEC.BAT and CONFIG.SYS files. Remove any TSR programs and device drivers that are automatically loaded at boot time.
- DOS 4.x requires 640K RAM. If you have 640K. do not have the DOS shell program loaded. To exit from the MS-DOS shell, press **F3** or select **Exit Shell** from the Exit menu on the Start Program screen.

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Neither the screen shot nor the text description associated with it accurately reflect what you see on the computer screen. The *column* headers on the Network Scientists screen are Number of Games, Geneprints Collected, and Research Credits Earned.

Number of Games The number of times you have played the Adventure. It does not count the number of times you have restored saved games.

Geneprints Collected The most geneprints collected in one adventure.

Research Credits Earned Total credits for all adventures.

Page 11-12

Sign up as a New Scientist

When signing up as a new scientist, please note this additional step:

2a. Press **Enter** once again.

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Continuing a Saved Game

To continue a saved game, use the following directions and disregard the instructions in the manual.

1. Select the **Computer** in the Reception Room.
2. Select the **Log,** and, using the arrow keys, move the highlight bar to select the scientist you logged in as when you last played the saved game. Press **Enter.**
3. At the the Designasaurus Network screen, highlight and select the **Retake icon** (showing a dinosaur hard at work on a movie set).
4. When prompted, press Y to restart the saved game.

You may save only one game per scientist. For instance, if you saved a game as "Dr. Frank N. Stein," and logged in the next day as Dr. Stein to go Further In the Adventure, when you saved your game at the end of the second session, the new game would replace the game you saved the day before.

Study Guide sessions cannot he saved.

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Creating Your Own Dinosaur (Additional Information)

Choose the dinosaur parts you want *or* let the computer put them together randomly.

1. Highlight the **Dice** icon and press **Enter.**

2. Each time you press **Enter** the computer generates a new dinosaur original! When you see the one you like, use the arrow key to highlight the **Creation Chamber** icon **and press Enter.**

Whether you ask the computer to assemble an original dinosaur or you create one yourself, your new creation will automatically be raved. Select the MY DINOS Icon whenever you wish to use it again.

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The Options Window

Press Esc to activate the Options Window at any time during the game. The **Sleep** icon is displayed at the beginning of each game.

See Dinosaur In addition to showing your dinosaur, this option also shows how many credits and geneprints you have collected when you are playing the Adventure.

Load/Save You can save a game at this point in the program. However, you cannot load a game from here.

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Printing a Dinosaur Picture

Step **4. Shaded/Outline** is referred to as **Regular/ Coloring Rook** on-screen.

Step 5. To print your own creation, select **My Dinos** and press **Enter.** Then follow the remaining instructions described in step 5 in the manual.

DESIGNASAURUS II

Lab Manual Addendum

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DESIGNASAURUS II™ ACCESS CODES

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KATHODON

LISADONT

LARRYNOCHUS

SCOTTANODON

DESIGNASAURUS

GREGADACTYL

JORDANODON

TERRYNOSAURUS

TRINORMATOPS