



v1.0.8

Instructions

©1998 Pangea Software
All Rights Reserved

Nanosaur is a trademark of Pangea Software

<http://www.realtime.net/~pangea>

THE STORY & GOAL

It is the year 4122 and a species of dinosaurs known as the Nanosaurs rule the earth. Genetic experiments by the humans brought the Nanosaurs back from extinction and gave them intelligence, but a plague wiped out the humans so the Nanosaurs built a society of their own. In an attempt to further strengthen the dinosaur society, you are being sent back in time to retrieve dinosaur eggs of five species before the giant asteroid wipes them out.

THE NANOSAUR



You are equipped with a Jetpack, a K88 Multi-Purpose Cannon, a GPS map locator, and a Temporal Compass for locating time portals. You have a limited amount of ammunition for your weapon, but you can gather additional ammunition that was left behind by your predecessors who failed this mission. Your jetpack has been specially equipped to be able to refuel from gas vents found near volcanic areas.

When you locate an egg, you must pick it up, and deposit it in a time portal. The time portals will appear at regular intervals and your temporal compass will aim you at the nearest active portal. Once all of the eggs have been transported to the future, your mission will be a success!

PLAYING THE GAME

THE KEY CONTROLS

The following are the key controls you use to play the game. Most of these are explained in more detail later in this manual.

Arrows	- turn & move
< >	- spin the camera around
1 2	- zoom camera in/out
Command	- jump / double-jump
SpaceBar	- attack

Shift	- use next weapon
Option	- Pick up / throw item
A Z	- increase / decrease jetpack thrust
Ctrl - M	- toggle music on/off
Ctrl - B	- toggle ambient sound on/off
+/-	- raise/lower volume
F8	- show frame rate
ESC	- pause game
TAB	- change camera modes (normal /head- cam)
G	- toggle GPS map
Command- Q	- quit the application at any time

MOVING THE NANOSAUR

Controlling the Nanosaur is fairly simple. Use the arrow keys to move forward and backward, and to turn left and right. The Command key causes the Nanosaur to jump, and you can also do a “double-jump” by pressing the Command key again at the apex of the first jump. A double jump will cause the Nanosaur to jump extra high, but the trick is in timing the second press of the Option key.

THE WEAPONS

When the game starts, you only have ammunition for one weapon: the Blaster. Each time you fire your weapon, you will lose one round of ammunition and once you run out of ammo, you will not be able to attack until you get more.

Ammunition for the various weapons is scattered around the terrain. To gather ammunition, simply walk over it and it will automatically be added to your inventory. If the ammunition is for a weapon you didn't previously have, then you will be able to select this new weapon and use it.

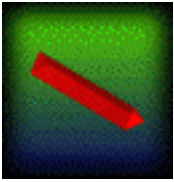
To select a different weapon, press the Shift key. This will cycle through your available weapons and display the weapon's icon on the screen. Below the weapon icon is a counter showing how many rounds of ammunition still remain for the currently selected weapon:



The Weapon & Ammo indicator

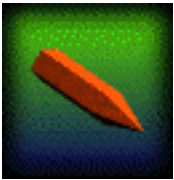
There are five different types of weapons in the game:

BLASTER



This is the weapon you are given when the game begins. They're a good all-purpose weapon when you're low on the other weapons.

HEAT-SEEKER



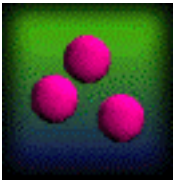
This is an intelligent weapon that hunts down the nearest dinosaur. Does lots of damage when a target is acquired.

SONIC SCREAM



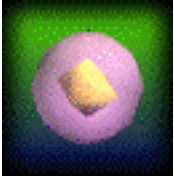
A sonic pulse weapon that has a very limited range, but does lots of damage.

TRI-PODS



This weapon shoots three explosive pods in a scatter pattern. Each pod does a small amount of damage, but the force of all three pods combined is very good.

NUKE



This is a very dangerous weapon to use. Only fire it at targets far away. When the nuke detonates, it will destroy anything nearby and if you fire it at point-blank range you will surely be destroyed.

POWERUPS

Powerups will give you anything from more ammunition to health to shields. When you see a powerup, just walk over it to activate it.

All of the powerups look basically the same except that they are different colors and have different images on the front and back. The following is the powerup for the Shield.



The Shield Powerup

The Shield powerup will make you invincible against enemy attack for 20 seconds. Note, however, that it will not make you invincible against hot lava should you fall into it.

THE JETPACK

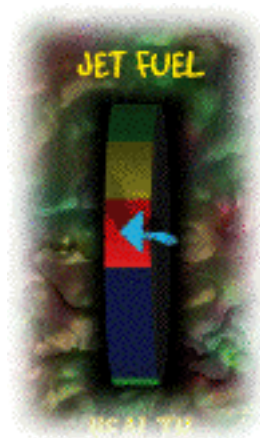
The jetpack has a small amount fuel when the game starts. You can get fuel by recharging it at one of the gas fissures - gas vents that you stand on to refuel your jetpack. When you spot one of these, just walk on top of it and your jetpack's fuel meter will rise. Some gas vents will give you unlimited fuel so you can always return for more, but others will run out as you fuel up.



Standing on a gas vent to refuel the jetpack

To activate the jetpack use the A and Z keys. The A key will increase jetpack thrust and raise you higher, and the Z key will decrease jetpack thrust and lower you. If the jetpack runs out of fuel, then it will simply turn off and you will fall to the ground.

There is a jet fuel meter that shows you how much fuel remains:



The Jet Fuel Meter

Green indicates plenty of fuel, yellow means low, and red means critical. Blue indicates empty.

YOUR HEALTH & LIVES

The Nanosaur has a limited amount of health and when the health runs out, the Nanosaur dies. When the Nanosaur dies, the game is not ended, but rather a new Nanosaur is teleported in to take his place. But be aware that you only have 3 lives total for the game. Once you have exhausted all 3 lives, the game is over and you will have failed your mission.

When you die and a new Nanosaur is teleported in, you will lose all of your existing weapons, and fuel. The new Nanosaur only has the default Blaster weapon just like when you started playing.

To avoid getting killed, try to find as many Health powerups as you can. The health powerups will increase the Nanosaur's health by about a third.



The Health Powerup

COLLECTING EGGS & WINNING

You have only 20 minutes to complete your mission since a giant asteroid is going to crush the earth and wipe out all of the dinosaurs. Therefore, you must act quickly to find the eggs of five dinosaur species and return them to the future.



A "red" Egg in its nest

You may carry only one egg at a time, so it is important to deposit a recovered egg in the time portal as quickly as possible.



The egg being carried by the Nanosaur

To return an egg to the future, simply locate the nearest time portal and throw the egg into it. Or you can just walk into the time portal and the egg will be sucked into it. To pick up or throw the egg press the Option key.



A Time Portal

There may be more than one egg for each species, but you only need to recover one. Any additional eggs will only give you points. You must collect at least one of each species to complete your mission.



The five different eggs which you must return to the future

When the final egg species is placed into the time portal a new Exit portal will appear to transport you back to the future where you will be hailed a Hero! You've won!

As you collect eggs, they will appear in the Egg status area:



The Egg Recovery Indicator showing the “red” egg recovered.

The first egg of a species is worth 20,000 points. Each additional egg of the same species is worth 5,000 points. If you successfully recover at least one egg of each species you not only win the game, but you are awarded an additional 150,000 points!

THE DINOSAURS

The other dinosaurs will attack you since they don't like having their eggs stolen, plus they're stupid and like to eat what they don't understand. Since the giant asteroid is going to kill them all anyway, there's no loss in you shooting every living thing that comes your way - just protect the eggs! Be careful, however, because some of the dinosaurs and other enemies are deadly killers. Many need to get near you to hurt you, but others such as the acid spitting dinosaur can hurt you from quite a good distance away.

There are five species of dinosaurs which you will encounter in the game:

DILOPHOSAURUS



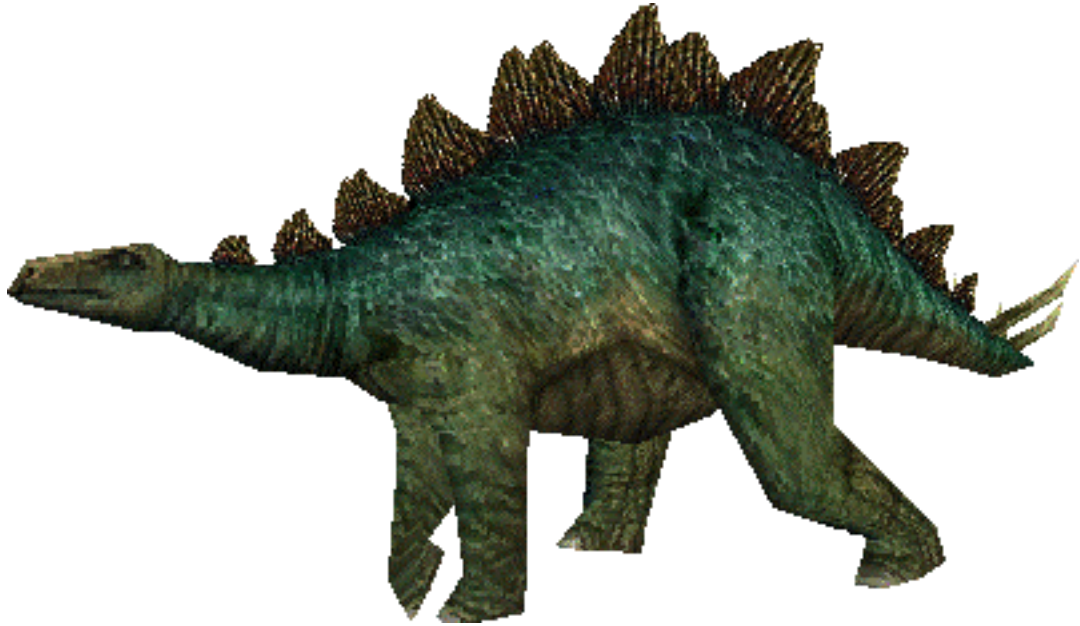
This is a fast little dinosaur who can spit acid blobs at you. Luckily, they're easy to destroy.

PTERANODON



These pesky flying dinosaurs are difficult to destroy because they like to hover above you and dive-bomb you when you least expect it. Some even drop rocks on you.

STEGOSAURUS



These giants are difficult to destroy simply because they're so huge, but they're also slow and easy to avoid.

TYRANNOSAURUS REX



Very aggressive and like to pounce on you. When you see one of these, get ready for a battle.

TRICERATOPS



Their thick skin makes them difficult to destroy. They like to charge at you with their sharp horns, and they are very good at hiding in bushes waiting for you to walk by.

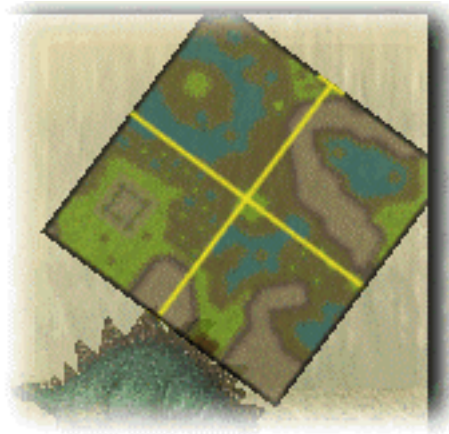
HAZARDS

Dinosaurs are not the only things to be careful of in the game. There are many other natural terrain hazards to watch out for. You may encounter large lava flows in some places in the game. If you step into bubbling lava you will be hurt badly.

Also beware of rolling boulders, lava balls, and spore shooting fungi. Keep an eye out for these and other treacherous hazards.

THE GPS MAPPING SYSTEM

To help you find your way around the terrain, you are equipped with a GPS Mapping tracker. This system shows you a satellite's view of where you are. As you move, the map will scroll to show your new position. This feature is critical to finding your way around the terrain without getting lost.



The GPS Map Display

Press the 'G' key to toggle the GPS map on and off.

THE TEMPORAL COMPASS

In addition to the GPS Mapping System, you also have a Temporal Compass to help you locate Time Portals. The Temporal Compass is a simple pointing mechanism that always points you in the direction of the currently active time portal.



The Temporal Compass

SCORING

You are rewarded points for destroying enemies and recovering eggs. The following shows what various things are worth:

RECOVERING EGG SPECIES:	20,000
RECOVERING ADDITIONAL EGGS OF SAME SPECIES:	5,000 (each)
T-REX:	1 250
PTERANODON:	2500

STEGOSAURUS:	1 000
TRICERATOPS:	1 500
DILOPHOSAURUS:	725

TECHNICAL INFORMATION

SYSTEM REQUIREMENTS

- At least a 120mhz 604e Macintosh or 180mhz 603e Macintosh. Note that Nanosaur will not run on a 601 Macintosh!
- A game-capable 3D Accelerator card such as the Rage II or Rage Pro from ATI. Note that you should install the latest version of the ATI 3D driver in order for many of the effects in Nanosaur to work properly.
- QuickDraw 3D 1.5.4 or newer
- QuickTime 3.0 or newer.
- DrawSprockets 1.1.3 or newer.

COMMON QUESTIONS AND ANSWERS

- Q: The shadows for the dinosaurs look messed up.
- A: If you have an ATI 3D card, you must have at least v4.3.6 of the ATI 3D Extension installed.
- Q: I've got 2 monitors on my Mac and it won't let me select the second monitor or the game doesn't appear on the second monitor.
- A: Make sure you have the latest version of Draw Sprockets installed. Older versions have bugs with multiple-monitor systems. You can get the latest Draw Sprockets from www.unsupported.com. We have also had bug reports with multiple monitors if Speed Doubler is installed.

Q: I can't see the status area showing me my weapons, health, etc.

A: You're probably running on a 3Dfx accelerator card. Most versions of the 3Dfx card are not compliant with QuickDraw 3D and do not allow simultaneous display of 2D and 3D graphics. There is no fix for this except to buy a different card.

Q: Almost everything is white.

A: You're running out of VRAM probably because your monitor could not be resized to 640x480. Try changing your monitor resolution to 640x480 by hand.

Q: I've activated the Fog option, but I don't see any fog.

A: Fog only works with the ATI Rage Pro series of 3D accelerator cards and you must have at least v4.3.6 of the ATI 3D extension installed.

Q: The game crashes when I try to run it.

A: Do not try to run Nanosaur on a PowerPC 601 machine. Don't run it with Speed Doubler (we've had reported problems with it).

Q: The game crashes a few seconds or minutes into playing it.

A: Make sure you have the latest version of the game installed.

Q: The game seems jerky - "hiccups" every few seconds.

A: Do not run Nanosaur off of a CD or other slow storage systems. Only run it off of a hard drive. The music is streamed from the drive and if it's slow, then you get the occasional hiccup as music data is loaded in.

TECHNICAL SUPPORT

To get technical support for Nanosaur, visit the Pangea Software web site at:

<http://www.realtime.net/~pangea>

CREDITS

Nanosaur was created by people all around the world. From Texas to California, to Canada to Sweden. Most of us have never even met one another, yet we were able to pull this off thanks to the power of e-mail and the wonderful thing we call the Macintosh!

Concept &
Programming

Brian Greenstone
pangea@bga.com

Art &
Level Design

Scott Harper
harper900@aol.com
<http://members.aol.com/pictpusher/PixelPush.html>

Cinematics

Chris Ashton
chrisa@presto.com

Theme Song

Jens Nilsson
carnil@fh.skurup.se
<http://hem.passagen.se/dufuss>

Game Song

Mike Beckett
mbeckett@nkm.bc.ca
www.nkm.bc.ca

Special thanks to Chris Bentley at ATI Technologies. Without his help this game could have never been created.

REVISION HISTORY

- v1.0.8 Now gives a meaningful error if Data folder is missing. Increased stack size of application to prevent some reported crashing. Fixed bug related to picking up eggs and putting them in the teleporter. When fog is disabled, clear color is black instead of white on the 4MB version of the game. Fixed problem with player skidding when the game's frame rate exceeded ~50 fps. Fixed problem with enemies being culled when they were actually visible. Other Misc bug fixes.

- v1.0.7 Minor internal tweaks for iMac and Powerbooks.

- v1.0.6 Fixed more assorted crash bugs, and fixed some sound anomalies and other minor things.

- v1.0.5 Fixed crash bug where game would occasionally lock up after playing the win or lose movies.

- v1.0.4 Incredibly minor tweak to RAVE blending modes so that shadows will appear correct with new ATI 4.30 drivers. Also tweaked memory check so only looks for 1.5 free Megs of VRAM instead of 2 free Megs. That should help out people with Powerbooks and non-multisync monitors.

- v1.0.3 Fixed clipping bugs which were causing software renderer to crash. 3D accelerator cards might run a little faster now as well.

- v1.0.2 Fixed a few crash bugs and memory leaks.

v1.0.1 Minor fix to ATI version detection to disable fog on old drivers. Fixed Type 12 crash bug.

v1.0 We shipped it April 6, 1998!