Lolita's Story

Keiko the killer whale (*Ornicus orca*) made an unforgettable appearance in the 1993 Warner Bros. film Free Willy, which sent out a strong message towards the emancipation of this species.

Now in 2009 Lauren Kimball in her film 'Perchance to Dream' documents the tragic life story of Lolita, the oldest killer whale in captivity through the medium of animation.

Kimball, an aspiring animator from Denver, had an ambition to be a whale trainer while growing up. Combining her love for art and orcas she decided to create awareness and help Lolita through her film. This idea sparked while doing research on orcas and discovering Lolita's situation startled Kimball when she learnt that this animal of such enormous size and intelligence was being treated unfairly in captivity.

'Perchance to Dream', the line taken from the famous soliloquy spoken by Shakespeare's Hamlet, serves as the title to resonate with the theme of the film. This four minute 30 seconds 3D animated feature narrates the ruthless events in the life of Lolita the 44 year old orca who has spent the past 38

years in the world's smallest whale tank at the Miami Sea Aquarium. The 3D technique of animation was used because it captured the underwater world well. Kimball says, "I wanted to bring beautiful imagery as well as the story together in a way that would capture the audience's attention." The concept was first conceived in 2006 and with a total of 13 people working on the project it was completed in January 2009.

The work on the storyboard began in 2007 with character designs, test models and extensive research. In terms of research, studies were done from pictures, film clips and books to provide references. Documentaries on killer whales in the wild and in captivity along with live footages of Lolita were repeatedly watched to understand how she moved in her constricted space. A few of the most notable references used in

the film were the documentary by Tim Gorski titled *Lolita: Slave to Entertainment* and books like *Orca: The Whale Called Killer* by Erich Hoyt and *Behind the Dolphin Smile* by Ric O'Barry. Online references were used for specifics critical to the film like orca skeletons, markings and specific information about the way they live in pods or schools. After a few practice animations Lolita was ready to be animated in a convincing way. Kimball wanted a technique that was accurate but expressive so Lolita's tank was made to scale with the help of numerous photographic references, tank diagrams and first hand information from the people who visited the tank and been inside it.
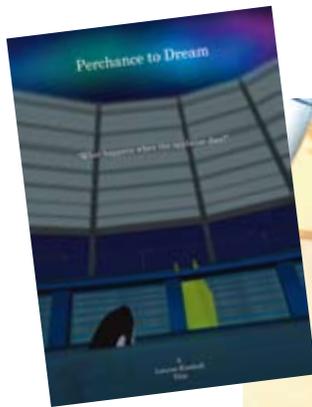
A challenge was to get the orca's expressions right, whether a smile, frown or grimace despite the fact that orcas have no facial muscles. While trying to preserve the integrity of her anatomy Lolita's model was given larger and more expressive eyes. Kimball wanted the audience to identify the film as animation with enough respect to reality that Lolita can be identified as being a real whale in a real situation. Kimball says, "I love animating and watching something inanimate come to life; to make an audience

believe in and feel for an animated character is profound." For the 3D animation Autodesk Maya 2008 was used in conjunction with Adobe Photoshop CS3 for textures and Adobe Premiere Pro CS3 for compositing.

Since quite a few sequences were underwater scenes the water dynamics aspect played an important part in the film. Sarah Mathia one of the water dynamic artists was in charge of creating the water particle effects for the film. On receiving the scene files with the completed animation, proper particle emitters and environmental fields were added. This worked for the simple and complex scenes by using a surface emitter and then creating a gravity field adjusting the magnitude of gravity and particle speed. The difficult scenes were the ones which included particles as well as a splash especially the part where the particles emit just from the dorsal fin of the whale. Mathia says, "The biggest challenge was manipulating the particles to achieve the proper look and consistency of water which involved a lot of experimentation with size, speed and threshold of the particles until it looked and moved correctly."

was incredibly simple to manipulate and created the illusion of consistent, scale-like shapes that could be wrapped around the animals body without altering the pattern." The software's used to create this effect were Adobe Photoshop CS3, Autodesk Maya 2008 and Combustion 4.

Andy Gerding who worked on the lighting scenes in the film used a unique approach by assigning a basic 50 percent gray material to every object at first and then working on the darkest lights in the scene. Then bizarre colours were added to the lights colour attribute to find out precisely what light affects the scene and after finding a

dialogues in the film. Sam Beaman and Mitch DeMatoff, audio illustrators from Valentine Pro Productions were on the job in composing the music score to reveal Lolita's emotional journey. Beaman and DeMatoff say that it was agreed that a symphonic arrangement would be best to convey the wide range of emotion in this story. However there were no funds for a symphonic orchestra. So they decided to do it themselves with DeMatoff playing all the parts on keyboard instruments and Beaman taking care of the sound mixing and sound effects.

Texture artist Sarah Gentry was responsible for the surface texturing on physical objects. The models of the male and female Chinook Salmon, the whale tank and the killer whale were UV mapped. The textures for the Chinook Salmon were hand painted and in search for a style with cartoon like characteristics as well as photorealism, photographic references, taxidermied specimens and artists renditions of the various species were taken into account. An innovative method was used in attaining the fish-scale map by using women's fishnet leggings. Gentry says, "By scanning a cropped piece of this apparel with high contrast, it gave me a source image that

good position for that light, the intensity was decreased and suitable colours were used. The morning scene where the two orcas skim the surface of the ocean's water level proved to be challenging. Gerding says, "I wanted the water to have a glint of reflected light on the side of the orcas and to get the desired effect I used three standard lights with blue and orange hues and two negative lights with a negative intensity to absorb unwanted light bleed." The software used to attain this were Maya 2009 and a tool called Rosco swatch packet which is a real version of a colour picker in a computer software package.

Music plays an essential role as there are no

Lauren Kimball a senior at the Rocky Mountain College of Art and Design won the Golden Flamingo Viewers Choice Award in the Short Animation Films category at the South Beach Animation Festival for her film 'Perchance to Dream' which is also being accepted in various other film festivals around the world. Kimball believes that animation takes what's inside an artist's mind and shows it to the world allowing the audience to draw their own conclusions on the subject. And it took Kimball around 8,100 rendered frames to show the world the difference between telling how an orca feels and showing how an orca feels.

— Joyce Lemos   ar