## WILD HOPE REWILDING RIO

	TIME CODE	VIDEO	AUDIO
1.	01:00:01;12	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		Silence in the forest is a sign that there is a very serious problem happening here. We are missing the animals. And that affects the entire dynamics of the ecosystem.	Silêncio na floresta é sinal de que tem um problema muito grave aqui acontecendo. Estão faltando os animais. E isso afeta toda a dinâmica do ecossistema.
2.	01:00:16;05	[Subtitles in ENGLISH]	MATHEUS DE ARAUJO (Portuguese):
		I think they are ready to be released. We'll double the population.	Eu acho que estao prontos a ser soltos. Nós vamos dobrar a população.
3.	01:00:22;05	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		We bring the animals back so that the interactions they promote, the plants that they eat, the animals that they interact with, they return, and the ecosystem works again. I hope in the upcoming years this silent forest will become noisy again.	A gente traz os animais de volta para que as interações que eles promovem, ou seja, as plantas que eles comem, os animais que eles interagem. Isso volte a acontecer e o ecossistema volte a funcionar. Então, o que eu espero para os próximos anos é essa floresta silenciosa voltar a ser barulhenta
4.	01:00:40;22	GRAPHIC TITLE:	
		WILD HOPE	
		REWILDING RIO	
5.			FERNANDO FERNANDEZ (Portuguese):
	01:00:52;16	[Subtitles in ENGLISH]  It may not seem like it, but we are in the city of Rio de Janeiro, right? This forest is completely within the city of Rio de Janeiro.	Bom, pode não parecer, mas nós estamos na cidade do Rio de Janeiro, né? Essa floresta fica completamente dentro da cidade do Rio de Janeiro.

6.	01:01:06;15		NARRATOR:
	·		RIO DE JANEIRO, A BUSTLING METROPOLIS ON THE SOUTHEAST COAST OF BRAZIL, IS HOME TO 12 MILLION PEOPLE.
			MILLIONS MORE FLOCK THERE EACH YEAR FOR EVENTS LIKE CARNIVAL—THE BIGGEST CARNIVAL FESTIVAL IN THE WORLD. THE CELEBRATION TAKES PLACE JUST 5 MILES FROM THE HEART OF TIJUCA NATIONAL PARK.
7.	01:01:30;23	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		Tijuca is an example perhaps unique in the world. The city's main monument, Christ the Redeemer, is inside Tijuca National Park. There are more than 3 million people visiting per year. Tijuca is part of Rio's life.	Tijuca é um exemplo talvez único no mundo. O principal monumento da cidade, que é o Cristo Redentor, está dentro do Parque Nacional da Tijuca. São mais de 3 milhões de pessoas por ano visitando. A Tijuca faz parte da vida do carioca.
8.	01:01:49;08	GRAPHIC ONSCREEN:	NARRATOR:
		Map of Brazil showing where Rio is	AT 15 SQUARE MILES, TIJUCA IS ONE OF THE LARGEST URBAN RAINFORESTS ON EARTH. IT APPEARS LUSH AND WILD. BUT LOOKS CAN BE DECEIVING.
	01:01:52;08	GRAPHIC ONSCREEN:	DECEIVING.
		Map of Tijuca National Park in Rio de Janeiro	
9.	01:02:05;22	LOWER THIRD:	
		ALEXANDRA PIRES	
		Biologist	
	04.00.40.00	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
	01:02:10;02	The history of the park is very interesting because it is a history of deconstruction and reconstruction.	Então, a história do parque é é muito interessante porque é uma história de desconstrução e reconstrução.
10.	01:02:22;19		NARRATOR:
			AS RIO GREW UP WITHIN THE LARGER ATLANTIC RAIN FOREST, THE SURROUNDING AREA WAS

			HEAVILY DEFORESTED FOR CATTLE RANCHING AND COFFEE FARMS.
			BY THE 1850'S, WITHOUT THE FOREST TO REGULATE RAINFALL AND FILTER DRINKING WATER, THE CITY'S WATER SUPPLY BECAME COMPROMISED.
			SO IN 1861, THE LAST BRAZILIAN EMPEROR, PEDRO THE SECOND, ORDERED ONE OF THE WORLD'S FIRST REFORESTATION PROGRAMS.
			A HUNDRED YEARS LATER, IN 1961, TIJUCA WAS NAMED A NATIONAL PARK.
11.	01:02:59;14	[Subtitles in ENGLISH]	FERNANDO FERNANDEZ (Portuguese):
		It was a pioneering effort, right? To reconstruct a forest in the metropolis on this scale.	Então, foi um esforço pioneiro, né? De você fazer reconstrução nessa escala de uma floresta na metrópole.
12.	01:03:08;10		NARRATOR:
			PIONEERING YES, BUT COMPLETE, NO.
13.	01:03:14;15	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
	ŕ	Tijuca National Park basically has just one-third of the medium and large mammals today that they had in the past.	O Parque Nacional da Tijuca, basicamente tem apenas hoje um terço dos mamíferos médios e grandes que tinham no passado.
	01:03:25;04	LOWER THIRD:	
		MARCELO RHEINGANTZ	
		Biologist	
14.	01:03:29;14		NARRATOR:
			DESPITE ITS NATIONAL STATUS, YEARS OF HABITAT LOSS AND ILLEGAL POACHING DEVASTATED TIJUCA'S ANIMAL POPULATIONS.
15.	01:03:38;04	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		When a forest is empty, it doesn't function as a natural environment.	Então uma floresta vazia ela não consegue desenvolver todas as funções que um ambiente natural pode fazer.

16.	01:03:50;04		NARRATOR:
			ECOLOGIST ALEXANDRA PIRES SAW WORRYING SIGNS OF THE DEFICIENCY IN 2010.
			DURING A ROUTINE SURVEY, SHE NOTICED AGOUTI TREE FRUIT, ROTTING ON THE FOREST FLOOR.
17.	01:04:04;06	[Subtitles in ENGLISH]  Fruit is an extremely costly resource for a plant to produce. The fruit is rich in fats, in sugars. So, when you find intact fruits on the forest floor, this is a clear sign that the fauna is not present.	ALEXANDRA PIRES ( <i>Portuguese</i> ): Porque fruto é um recurso extremamente custoso para uma planta produzir. O fruto é rico em gorduras, em açúcares. Então, quando você encontra no chão da floresta frutos intactos, isso é um sinal claro de que a fauna não está presente.
18.	01:04:24;06		NARRATOR:
	,		IN THIS CASE, THE MISSING FAUNA WAS A SMALL RODENT THAT BEARS THE SAME NAME AS THE TREE, THE AGOUTI.
19.	01:04:32;12	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		The agouti depends on the fruits of the agouti tree for food and the agouti tree depends on the agouti to produce seedlings.	A cutia depende dos frutos da cutieira para se alimentar e a cutieira depende da cutia para produzir seus filhos, na verdade, sua prole.
20.	01:04:46;21		NARRATOR:
	,		ALEXANDRA'S FIND WAS AN ALARM BELL, AND SPARKED A LONG-TERM EFFORT TO RESTORE TIJUCA'S MISSING ANIMALS: PROJECT REFAUNA WAS BORN.
21.	01:04:59;09	[Subtitles in ENGLISH]	FERNANDO FERNANDEZ (Portuguese):
		Refaunation. It's the idea of restoring the fauna with native species that became locally extinct not long ago.	Refaunação. é a ideia de você restaurar a fauna com espécies nativas extintas localmente há pouco tempo.
	04.05.00.45	LOWER THIRD:	
	01:05:08;12	FERNANDO FERNANDEZ	

		Ecologist	
22.	01:05:12;13	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		The goal of Refauna is more than bringing these animals back. Each of these animals is like a piece in a puzzle. So that's why it's important to perceive what is missing and bring those animals back to the forest so it will be able to function in an entire, complete way, as it did in the past.	O objetivo do Refauna, mais do que trazer esses animais de volta simplesmente. Cada um desses animais é como se fosse uma pecinha num quebracabeça. Então, é por isso que é importante a gente perceber quem está faltando e trazer esses animais de volta para a floresta para que ela possa funcionar de uma forma inteira, completa, como era no passado.
23.	01:05:38;08		NARRATOR:
			FIRST ON REFAUNA'S LIST WAS THE AGOUTI. IT HAD DISAPPEARED FROM TIJUCA 30 YEARS BEFORE—THE TARGET OF ILLEGAL POACHING.
			BUT IT HELD ON—WITH HELP— IN ONE UNLIKELY PATCH OF GREEN.
24.	01:05:55;20	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		We had a somewhat peculiar situation in Campo de Santana. Around 1000 agoutis within the city of Rio de Janeiro.	E a gente tinha uma situação um tanto peculiar no Campo de Santana. Cerca de 1000 cutias da cidade do Rio de Janeiro.
25.	01:06:06;18		NARRATOR:
			A SIZABLE POPULATION LIVING RIGHT IN THE CITY CENTER.
			THEY'RE FED BY PARK STAFF, AND HAVE BECOME QUITE A SPECTACLE.
26.	01:06:19;02	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		When I was little, this square always had many agoutis, which are the little rodents that I fell in love with since I was little.	Qunado eu era pequena, essa praça sempre teve muitos cutias, que são uns roedores que eu me encantei desde pequena com eles.

27.	01:06:29;19		NARRATOR:
			THE REFAUNA TEAM BEGAN MOVING AGOUTI TO THE PARK, WHERE THEY HAD AN IMPORTANT ROLE TO PLAY FOR THEIR NAMESAKE TREES AND OTHERS.
28.	01:06:40;10	[Subtitles in ENGLISH]	FERNANDO FERNANDEZ (Portuguese):
		For an animal of their size, they disperse seeds that are very big.	Para um animal de seu tamanho, elas dispersam sementes muito grandes.
29.	01:06:49;09	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		The fruits are very hard inside. This protection that surrounds the seeds is extremely rigid.	Esses frutos são muito rígidos por dentro. Essa proteção que envolve as sementes.
30.	01:06:59;01		NARRATOR:
			THE AGOUTI'S STRONG TEETH AND JAWS CRACK OPEN THE LARGE FRUIT LIKE A CAN-OPENER.
31.	01:07:05;18	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		Inside each of these structures, we have 2 to 3 seeds, but for them to germinate, we need the agoutis to open these fruits.	Dentro de cada uma dessas estruturas, nós temos de 2 a 3 sementes, mas pra elas germinarem, a gente precisa que as cutias abram esses frutos.
32.	01:07:18;20		NARRATOR:
			ONCE THEY EXTRACT THE SEEDS, THEY OFTEN SAVE THEM FOR LATER BY BURYING THEM IN SHADY AREAS OF THE FOREST.
			LUCKY FOR THE SEEDS, THE AGOUTI CAN BE FORGETFUL.
33.	01:07:33;17	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		Seeds depend on humidity and darkness to germinate. So, when the agouti buries these seeds, it is in the ideal	Das sementes dependem de umidade e de escuro para germinar. Então, quando a cutia enterra essas sementes, ela está na condição ideal para se tornar uma plântula.

		condition for it to become a seedling.	
34.	01:07:46;08		NARRATOR:
	,,,,,,		A TOTAL OF 61 AGOUTI NOW CALL TIJUCA HOME.
			AND A NEW GENERATION OF NATIVE TREES ARE RETURNING ALONG WITH THEM.
35.	01:07:56;07	[Subtitles in ENGLISH]	FERNANDO FERNANDEZ (Portuguese):
		At least two species of trees are now reproducing again because of the reintroduction of the agouti.	Ou seja, que pelo menos 2 espécies de árvores já estão reproduzindo de novo por causa da reproduza reintrodução da cutia.
36.	01:08:08;18		NARRATOR:
	0.1100.100,10		FOLLOWING THE SUCCESSFUL AGOUTI REINTRODUCTION, REFAUNA TURNED ITS ATTENTION TO ANOTHER SEED DISPERSER— THIS ONE WITH A MORE PECULIAR FARMING TECHNIQUE: THE YELLOW FOOTED TORTOISE.
37.	01:08:23;03	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		The tortoises keep the seeds in their digestive tract for several days. The tortoises have a stomach chemistry that breaks the dormancy of seeds. Seeds that would never germimate.	Os jabutis ela consegue manter as sementes no seu trato digestório por vários dias. Já os jabutis, por sua vez, eles têm uma química no estômago que vai quebrar a dormência de sementes e fazer com que algumas sementes que nunca germinarem.
38.	01:08:44;12		NARRATOR:
			IN 2020, REFAUNA WELCOMED 55 YELLOW- FOOTED TORTOISES TO THEIR NEW HOME IN THE PARK.
39.	01:08:51;20	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		We monitor our Tortoises through radio telemetry. Each animal has a device that emits a unique frequency, so that we know what they are	A gente vai monitorar eles através de rádio telemetria. Cada animal tem um dispositivo que emite uma frequência única para saber o que esse animal está fazendo, se ele está bem de saúde.

		doing and check that they are in good health.	
40.	01:09:07:05		NARRATOR:
	, , , , ,		LIKE THE AGOUTI, THE TORTOISES SPREAD SEEDS EFFECTIVELY, BUT ACROSS A RELATIVELY LIMITED RANGE. ANOTHER FOREST DWELLER HAS A WIDER IMPACT.
			IT GETS ITS NAME FROM THE REMARKABLE SOUND IT MAKES.
			THE LAST OFFICIAL DOCUMENTATION OF HOWLER MONKEYS HERE WAS MADE IN 1832, BY A YOUNG ENGLISH NATURALIST: CHARLES DARWIN.
	01:09:37;12	CDARING ONCORES.	DURING HIS AROUND-THE-WORLD VOYAGE ON
	01.09.37,12	GRAPHIC ONSCREEN:	THE BEAGLE, THE 23 YEAR-OLD MADE ONE OF HIS FIRST STOPS IN RIO.
		Map of Charles Darwin's voyage on the HMS Beagle around the world	
41.	01:09:46;17	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
	,	So it's a confirmation that the howler monkeys occurred here. And the howler monkeys, like agoutis, also disperse seeds.	Então é uma confirmação de que os bugios ocorreram aqui. E os bugios, assim como as cutias, também dispersam sementes.
42.	01:09:55:05		NARRATOR:
	, , , , , , , , , , , , , , , , , , , ,		HOWLERS COVER A LARGE TERRITORY, EATING MANY DIFFERENT TYPES OF FRUIT AS THEY PATROL.
			THEY LITTER THE FOREST WITH THEIR DROPPINGS, WHICH ARE PACKED WITH SEEDS READY TO SPROUT.
			IN 2016, THE REFUANA TEAM INTRODUCED A GROUP OF FIVE HOWLERS. THE FIRST TO CALL TIJUCA HOME IN OVER A CENTURY.
			SINCE THEN, SEVEN BABIES HAVE BEEN BORN IN THE WILD.
			AND MORE CAPTIVE BORN HOWLERS ARE BEING PREPPED FOR RELEASE.

43.	01:10:30;21	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
70.	01.10.00,21	We will increase the number of females, which is very important for us to increase diversity and genetics. We want these howler monkeys to return to being wild, free-living howler monkeys. They don't know what it is like to walk up a tree like that and consume the foods that are normally available to them.	E vai aumentar número de fêmeas, que é importantíssimo para a gente aumentar a diversidade genética. A gente quer que esses bugios voltem a ser bugios selvagens de vida livre. Eles não sabem como é andar numa árvore como que e consumir os alimentos que normalmente estão disponíveis pra eles.
44.	01:10:51;21		NARRATOR:
	01:11:00;02	LOWER THIRD: PEDRO ZERO Biology Student	BEFORE BEING RELEASED, THE HOWLERS NEED TO BE ACCLIMATED TO LIFE IN THE FOREST.
45.	01:11:03;02	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		This is the plant that we picked this past week, right?	Essa é a planta que a gente pegou na semana passada, né?
46.	01:11:05;23	[Subtitles in ENGLISH]	PEDRO ZERO (Portuguese):
		They really like it.	Eles gostaram bastante.
47.	01:11:08;10	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		Okay, great. Then let's get some and offer it to them again.	Tá ótimo. Então vamos pegar ela e vamos oferecer pra eles então de novo.
48.	01:11:13;23		NARRATOR:
			TO MINIMIZE HUMAN CONTACT IN PREPARATION FOR THEIR RETURN TO THE WILD, THE MONKEYS ARE FED THROUGH THE BARS OF THE ENCLOSURE.
49.	01:11:22;17	[Subtitles in ENGLISH]	FERNANDO FERNANDEZ (Portuguese):
		So, Matheus, how are our howler monkeys?	E aí, Matheus, como estão os nossos bugios?
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56.	01:12:19;18		NARRATOR:  AS THEY DO IN HABITATS AROUND THE WORLD, DUNG BEETLES NOT ONLY HELP SEED
55.	01:12:05;15	[Subtitles in ENGLISH]  Howler monkeys have a very important interaction with dung beetles. Beetles use howler monkey feces and, in doing so, improve nutrient cycling in the soil.	FERNANDO FERNANDEZ ( <i>Portuguese</i> ):  Bugio também tem uma interação muito importante com os besouros-rola-bostas com besouros no solo que utilizam as fezes dos bugios e, ao fazerem isso, melhoram a de ciclagem de nutrientes no solo.
			THEIR STUDIES HAVE REVEALED THAT THE ORIGINAL HOWLERS AND THEIR OFFSPRING HAVE ALREADY INTERACTED WITH 87 DIFFERENT PLANT SPECIES.  AS WELL AS AN UNDERSIZED, BUT CRITICALLY IMPORTANT GARDENER.
54.	01:11:44;22		NARRATOR:  THE REFAUNA TEAM EXPECTS THAT THE INFLUX OF NEW MONKEYS WILL HAVE A QUICK AND SIGNIFICANT IMPACT.
53.	01:11:39;22	[Subtitles in ENGLISH]  Very cool.	FERNANDO FERNANDEZ (Portuguese):  Muito legal.
52.	01:11:37;09	[Subtitles in ENGLISH] Yes, and the baby is very close to its mother.	MATHEUS DE ARAUJO ( <i>Portuguese</i> ): É, e o filhotinho tá bem perto da mãe
51.	01:11:31;23	[Subtitles in ENGLISH]  There's a little grooming going on there! Social interaction seems good, right?	FERNANDO FERNANDEZ (Portuguese):  Entao, ta havendo um groomingzinho la! A interacao social parece boa ne?
50.	01:11:25;13		NARRATOR:  AS THEIR RELEASE DATE APPROACHES, THE TEAM KEEPS AN ESPECIALLY CLOSE EYE ON THEM.

			NUTRIENTS THAT ARE THEN REABSORBED INTO THE SOIL.
			AS ALL THESE NATIVE CREATURES RETURN TO TIJUCA, THEY REFORGE KEY CONNECTIONS AND CULTIVATE NEW GENERATIONS OF NATIVE TREES.
57.	01:12:43;16	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		All species are important to maintaining a functional forest. I think it will be a livelier, more beautiful, more complete forest. A living forest that is reproducing.	Todas as espécies são importantes para manter uma floresta funcional. Eu acho que vai ser uma Floresta mais viva mais bonita, mais completa. Uma floresta viva que ta se reproduzindo.
58.	01:13:02;23		NARRATOR:
			IN THE COMING YEARS, THE TEAM PLANS TO REINTRODUCE MACAWS AND <i>OTHER</i> ANIMALS THAT CAN HELP DISPERSE SEEDS OR CONTROL ANIMAL POPULATIONS AS THEY GROW.
			ESSENTIAL STEPS TO THE REVIVAL OF THIS URBAN OASIS.
59.	01:13:19;09	[Subtitles in ENGLISH]	ALEXANDRA PIRES (Portuguese):
		The chance to not only bring back life to the forest, but to create a new life for them, too. This is all very exciting for me.	E trazer esses animais de volta para a floresta é ter a chance não só de trazer vida para a floresta, mas trazer uma vida nova para eles também. Então isso tudo é muito emocionante para mim.
60.	01:13:30;05	[Subtitles in ENGLISH]	MARCELO RHEINGANTZ (Portuguese):
		I want to be able to bring my son here, and we'll see what Charles Darwin saw. They are living in this forest. And the noise returns.	E eu quero poder trazer meu filho aqui. E a gente vê o que Charles Darwin viu. Eles vão ocupando essa floresta e voltando a ter o barulho.
	01:13:50;20	GRAPHICS ONSCREEN: Credits	
61.	TRT: 01:14:35:19		