

WILD HOPE *REBUILDING A FOREST*

	TIME CODE	VIDEO	AUDIO
1.	01:00:04:10	<p>TEASE Quando vi o fogo queimando, ia lá e apagava.</p> <p>Quando você apaga, você se enche de esperança.</p>	<p>MAURICIO RUIZ: When I saw the fire burning, I went there and put it out.</p> <p>When you get it done, you're filled with hope.</p>
2.	01:00:13:21	<p>Desmatamento, queimadas, corte de árvores, é importante entender a origem de tudo isso. Por que isso está acontecendo?</p> <p>A gente precisava trazer essas pessoas para um outro tipo de modelo de desenvolvimento.</p>	<p>MAURICIO RUIZ: Deforestation, burning, cutting down trees, it is important to understand the origin of it all. Why is this happening?</p> <p>We needed to bring these people to another type of development model.</p>
3.	01:00:29:18	<p>Nossa missão aqui é ganhar escala na recuperação. Toda tecnologia para nós é bem vinda.</p> <p>É papel de todos a restauração dos ecossistemas.</p>	<p>MAURICIO RUIZ: Our mission here is to scale recovery. Any technology is welcome for us.</p> <p>It is everyone's role to restore ecosystems.</p> <p><sound up> I-T-P-A!</p>
4.	01:00:45:12	<p>GRAPHIC: TITLE OPEN Wild Hope Rebuilding a Forest</p>	
5.		ACT 1	
6.	01:00:58:22	<p>GRAPHIC L3rd: Mauricio Ruiz Conservationist</p>	<p>MAURICIO RUIZ: Since I was very little, I spent a lot of time in the forest here, near my city.</p>

		Desde muito pequeno, Ficava muito tempo dentro da mata aqui perto da minha cidade,	
7.	01:01:07:10		<p>NARRATOR:</p> <p>MAURICIO RUIZ GREW UP IN BRAZIL'S ATLANTIC FOREST. IT'S LESS WELL KNOWN THAN ITS NEIGHBOR, THE AMAZON, BUT IT'S ONE OF THE MOST ENDANGERED ECOSYSTEMS IN THE WORLD.</p> <p>IT SUPPORTS 20,000 SPECIES OF PLANTS, AND OVER 2,000 KINDS OF VERTEBRATES, WITH NEW SPECIES STILL BEING DISCOVERED. MANY ARE FOUND NOWHERE ELSE IN THE WORLD.</p> <p>THE ATLANTIC FOREST HAD A PROFOUND EFFECT ON MAURICIO.</p>
8.	01:01:39:05	<p>Tem o momento da virada na minha vida em que esse amor pela natureza se transformou em ativismo ambiental.</p> <p>Eu tive a oportunidade de ir para a Amazônia. Meu pai foi fazer um filme, um documentário sobre a vida e a obra de um poeta sensacional chamado Thiago de Mello.</p> <p>E em determinado momento durante essa viagem, Thiago disse o seguinte que eu nunca mais esqueci. Ele falou. Então eu representando a Amazônia, você representando a Mata</p>	<p>MAURICIO RUIZ:</p> <p>There was a turning point in my life when this love for nature turned into environmental activism.</p> <p>I had the opportunity to go to the Amazon. My father went to make a documentary, about the life and work of an acclaimed poet named Thiago de Mello,</p> <p>and at a certain point during that trip, he said something that I never forgot. Thiago said, "so I'm representing the Amazon, you're representing the Atlantic Forest. We're going to join hands in the fight for nature conservation."</p> <p>He said, "Go home, gather your friends, create an institution, do projects and I will help you."</p> <p>I was a kid, I was 14 years old, I did exactly that.</p>

		<p>Atlântica, nós vamos dar as mãos na luta pela conservação da natureza.</p> <p>Ele falou. Vai para sua casa, junta seus amigos, cria uma instituição, faz projetos que eu vou te ajudar. Eu era garoto, tinha 14 anos, fiz exatamente isso.</p>	
9.	01:02:35:05	<p>GRAPHIC MAP (Part 1): WS of Brazil, showing the Amazon and the Atlantic Forest, original forest cover represented. Transition to what remains today.</p>	<p>NARRATOR: MAURICIO'S MISSION HAS TAKEN ON EVER-INCREASING URGENCY.</p> <p>HIS COUNTRY HAS LOST 13% OF THE AMAZON SINCE COLONIZATION. THE ATLANTIC FOREST HAS FARED FAR WORSE: BETWEEN 75 AND 90% OF ITS ORIGINAL RANGE HAS BEEN DEFORESTED. ABOUT ONE SIXTH OF BRAZIL'S TERRITORY.</p>
10.	01:03:00:20		<p>NARRATOR: THAT'S LARGELY BECAUSE THE COUNTRY'S TWO BIGGEST CITIES, SAO PAULO AND RIO DE JANEIRO, AND THE INDUSTRIES THAT SUPPORT THEM HAVE SPRAWLED ACROSS THE REGION.</p>
11.	01:03:11:03	<p>Desmatamento pode ter sido ocasionado pelo café, depois pela pecuária, transformar floresta em carvão.</p>	<p>MAURICIO RUIZ: Deforestation has been caused by coffee production, then by livestock, by turning forest into charcoal.</p>
12.	01:03:21:10		<p>NARRATOR: TODAY, 125 MILLION PEOPLE LIVE IN WHAT REMAINS OF THE ATLANTIC FOREST.</p> <p>THIS DEVELOPMENT HAS REDUCED MUCH OF THE FOREST TO TINY FRAGMENTS.</p>

			<p>WITHOUT CORRIDORS TO CONNECT THESE AREAS, WILDLIFE WITHIN THEM CAN'T MIGRATE, FIND NEW FOOD SOURCES, OR INTERBREED TO KEEP THEIR POPULATION VIABLE.</p> <p>IN 2006, THE GOVERNMENT PASSED A LAW PROTECTING THE SURVIVING FOREST FROM FUTURE DEVELOPMENT.</p> <p>BUT IT'S UP TO CIVILIAN-LED ACTION TO ENFORCE IT. THAT'S WHERE PEOPLE LIKE MAURICIO STEP IN.</p>
13.	01:04:03:17	O Estado não chega em todos os lugares, não consegue chegar com oportunidades de emprego, de oportunidade de renda, de capacitação profissional, sensibilização. E a gente, a gente consegue cumprir esse papel.	<p>MAURICIO RUIZ: The State does not reach everywhere. It cannot provide employment opportunities, income opportunities, professional training, awareness raising. And we, we can fulfill this role.</p>
14.	01:04:17:10	<p>GRAPHIC Map (part 2): We zoom in and see the outline of Atlantic Forest region in Brazil. We highlight 2 points - Tingua forest and Serra da Bocaina National Park and the region in between.</p>	<p>NARRATOR: MAURICIO FOUNDED THE EARTH INSTITUTE FOR ENVIRONMENTAL PRESERVATION, OR ITPA, A LITTLE OVER 25 YEARS AGO.</p> <p>ITS MISSION IS TO RESTORE THE DEFORESTED CORRIDOR BETWEEN THE TINGUA FOREST AND SERRA DA BOCAINA NATIONAL PARK, ABOUT 50 MILES AWAY.</p> <p>IT'S A CRITICAL CONNECTOR FOR WILDLIFE, BUT THE EFFORT REQUIRES MASSIVE HUMAN BUY-IN.</p>
15.	01:04:43:15	É possível pensar um modelo econômico que faça com que as pessoas plantem o que ela destruiu.	<p>MAURICIO RUIZ: It is possible to think of an economic model that makes people plant what they destroyed.</p>

16.	01:04:51:10		<p>NARRATOR: ITPA WORKS DIRECTLY WITH THE COMMUNITIES WHO LIVE BESIDE THE FOREST AND ALSO DEPEND ON IT.</p> <p>PUBLIC AND PRIVATE FUNDING HELP ITPA EMPLOY 300 LOCAL WORKERS.</p> <p>SOME WORK ON A FIRE BRIGADE, FIGHTING FIRES THAT ARE ILLEGALLY SET TO CLEAR LAND FOR CROPS AND LIVESTOCK.</p> <p>BUT THE BIGGEST ARM OF ITPA IS ITS NURSERY.</p>
		GRAPHIC L3rd: Rejane Duarte Da Costa Arborist	
17.	01:05:24:11	Hoje aqui no viveiro temos 58 espécies.	<p>REJANE DUARTE DA COSTA: Today here at the nursery, we have 58 species.</p>
18.	01:05:31:00		<p>NARRATOR: REJANE DUARTE DA COSTA RUNS NURSERY OPERATIONS.</p> <p>SEEDS COLLECTED IN THE REGION ARE BROUGHT HERE TO BE RAISED.</p>
19.	01:05:42:10	Desde a fase da coleta de semente, germinação, e ela está madura para replantio, demora entre 3, 4 meses até 1 ano.	<p>REJANE DUARTE DA COSTA: From the stage of seed collection, germination, until it's ready for replanting, it takes between 3, 4 months to 1 year.</p>
20.	01:05:57:20		<p>NARRATOR: THESE TREES WILL EVENTUALLY REPLENISH THE ECOSYSTEM, HELPING TO PREVENT EROSION FROM FLOODING, AND FILTERING POLLUTANTS OUT OF THE SOIL.</p>
21.	01:06:09:20		<p>NARRATOR: THE NURSERY RAISES TWO HUNDRED THOUSAND SAPLINGS A YEAR AND HOPES TO SOON DOUBLE THAT OUTPUT.</p>

			<p>TO GROW THAT MUCH, ITPA HIRES AND TRAINS LOCAL WORKERS, AND PROVIDES ENVIRONMENTAL EDUCATION AS WELL.</p>
22.	01:06:29:00	<p>A nossa sede, de educação ambiental, que tem um viveiro escola, em que a gente envolve os alunos no processo todo de botar a mão na massa.</p>	<p>MAURICIO RUIZ: Our environmental education headquarters has a school, where we involve students in the whole process of getting their hands dirty.</p>
23.	01:06:44:15		<p>NARRATOR: STUDENTS OF ALL AGES LEARN THE VALUE THAT TREES BRING TO THEM AND THEIR COMMUNITIES.</p>
24.	01:06:55:00	<p>GRAPHIC L3rd: Leila Gomes Duarte Da Costa Seedling Producer</p> <p>É um trabalho muito importante. Pras crianças, eles mesmos ajudam a gente a fazer as mudinhas. As crianças também animadas a fazer.</p>	<p>LEILA GOMES DUARTE DA COSTA: It's very important work. For the children, they themselves help us grow the seedlings. They're also very excited to do it.</p>
25.	01:07:08:05	<p>Que eu espero daqui a cinco anos, que as pessoas se conscientizarem, de que a gente depende da mata. É que a gente conscientize os filhos sobre o valor de preservar da mata.</p>	<p>REJANE DUARTE DA COSTA: I hope that in five years, we raise awareness that we depend on the forest. And that we raise children's awareness about the value of preserving the forest.</p>
26.	01:07:34:15		<p>NARRATOR: THAT VALUE IS EQUALLY IMPORTANT FOR OLDER GENERATIONS TO UNDERSTAND.</p> <p>AT LEAST 80% OF THE REMAINING ATLANTIC FOREST IS PRIVATELY OWNED.</p>

27.	01:07:44:19	Quando a gente consegue convencer um proprietário de que ele tem que recuperar uma área da propriedade dele. A gente sabe que tão importante quanto as árvores que a gente vai plantar é o acompanhamento desse proprietário vendo essa floresta crescer.	MAURICIO RUIZ: When we manage to convince a landowner that they should reforest an area of their property, we know that the support of this owner, watching their forest grow, is as important as the trees we are going to plant.
28.		ACT 2	
29.	01:08:06:07	GRAPHIC L3rd: Artur Carlos Vieira Dos Santos Farmer Eu sou o proprietário dessa terra que está sendo reflorestada. Eu, eu. O comércio não trabalha na pecuária, mas os animais. E praticamente vive de, sei lá, pecuária aqui na região.	ARTUR CARLOS VIEIRA DOS SANTOS: I am the owner of this land that is being reforested. I started working in livestock farming and now depend on it here in the region.
30.	01:08:19:17		NARRATOR: MAURICIO HAS CONVINCED ARTUR DOS SANTOS TO REFOREST A PORTION OF HIS LAND.
31.	01:08:25:15	E estamos aqui na nossa terra. Aqui são 50 que está mais ou menos 100.000 mudas.	ARTUR CARLOS VIEIRA DOS SANTOS: We reforest here on our land, which is 50 hectares, about 100,000 saplings.
32.	01:08:31:10	Tem acidez. Só é ruim de chegar.	<Sound up> MAURICIO RUIZ: It has acidity. It's just hard to get to.
33.	01:08:34:10		NARRATOR: ITPA MAKES THE PROCESS EASY FOR HIM BY PROVIDING THE PLANTS AND THE LABOR FOR FREE.

34.	01:08:42:19	A gente vem então preparando a área. A gente então seca, a gente então marca o chão aonde vão ficar os berços de plantio, no espaçamento correto, a gente fura, amacia. Terra compactada. A gente precisa permitir que a raiz penetre naquele solo mais rapidamente.	MAURICIO RUIZ: We prepare the area where the plants will be located. We drill to soften compacted earth. We need to allow the root to penetrate that soil more quickly.
35.	01:09:01:05		NARRATOR: THEY PLANT A VARIETY OF NATIVE SPECIES, INCLUDING JACARANDA, MASTIC AND FLOSS SILK TREES, TO REBUILD THE FOREST DIVERSITY.
36.	01:09:17:00		NARRATOR: EACH PATCH OF FOREST WILL TAKE YEARS TO MATURE, BUT TOGETHER, THEY CREATE CRITICAL HABITAT FOR WILDLIFE, AND A HEALTHIER ECOSYSTEM FOR THE COMMUNITY.
37.	01:09:27:05	A gente quer mudar a vida das pessoas. A gente quer promover desenvolvimento. Nós devemos viver guiados como árvores e fraternalmente unidos como uma floresta. É isso que rege as nossas interações ecológicas e as relações que o Instituto estabelece com seus parceiros	MAURICIO RUIZ: We want to change people's lives. We want to promote development. We should live with trees as our guide, to be united like a forest. This is what leads the Institute's ecological practices and the relationships we establish with our partners.
38.	01:09:49:17		NARRATOR: THAT SENSE OF COMMUNITY IS WHAT INSPIRED ARTUR TO ACT.

39.	01:09:54:17	<p>E tinha muitos fogos, erosões, nascentes secando.</p> <p>Eu sei sim, através de que. Maurício, no início, são as nascentes que abastece o rio Guandu e Roncador, que abastece Rio de Janeiro. São são muitas.</p> <p>E quando você preserva a nascente e quem cuida, dá mais do rio.</p> <p>E hoje tem tudo isso, está tudo voltando.</p>	<p>ARTUR CARLOS VIEIRA DOS SANTOS: There were many fires, erosion, springs drying up.</p> <p>I know, through Maurício, at the beginning, when we started reforesting, there were several springs and he explained that the that springs supply the Guandu River and the Guandu River supplies Rio de Janeiro.</p> <p>So, you take care of the river, by caring for and planting trees.</p> <p>Today, all of this, it's all coming back.</p>
40.	01:10:23:13	<p>Então, tudo que é feito aqui em termos de destruição vai ocasionar um efeito direto sobre o rio que abastece o Rio de Janeiro.</p>	<p>MAURICIO RUIZ: Everything that is done here will have a direct effect on the river that supplies Rio de Janeiro.</p>
41.	01:10:35:15		<p>NARRATOR: OVER 25 YEARS, ITPA HAS RESTORED OVER 13 SQUARE MILES OF FOREST CORRIDORS.</p> <p>BUT AN AREA SIX TIMES THAT SIZE GETS CUT DOWN IN THE ATLANTIC FOREST IN JUST ONE YEAR.</p> <p>MAURICIO REALIZED HE NEEDED TO SCALE UP. DRAMATICALLY!</p>
42.	01:10:55:20	<p>Há 25 anos atrás, a nossa ambição enquanto movimento ambiental aqui da Mata Atlântica era cessar ao máximo a destruição, a perda da cobertura florestal. Continua</p>	<p>MAURICIO RUIZ: 25 years ago, our ambition as an environmental movement was to stop the destruction.</p> <p>But today we already see that there is a possibility of expanding the forest. It is necessary to expand.</p>

		sendo. Mas hoje a gente já enxerga que há uma possibilidade de ampliação da floresta. do que restou. É necessário ampliar e para ampliar.	
43.		ACT 3	
44.	01:11:17:10	GRAPHIC L3rd: Gregory Maitre Entrepreneur	NARRATOR: IN 2018, MAURICIO SET AN AMBITIOUS GOAL: PLANT 20 MILLION TREES. ENOUGH TO COVER FIVE TIMES AS MUCH GROUND AS THEY'VE FORESTED IN THE LAST 20 YEARS. TO DO IT, HE'S PARTNERED WITH A TECHNOLOGY COMPANY, MORFO, WHICH HAS AN INNOVATIVE APPROACH FOR LARGE SCALE RESTORATION. THEY DO IT WITH DRONES.
45.	01:11:42:19	Então, a nossa ideia é fazer com que aquela organização continue fazendo o máximo que ela consiga à escala humana e que a gente venha a adicionar mais áreas de restauração grata a la tecnologias. Usamos drones tanto para captura de imagens como para a semeadura também.	GREGORY MAITRE: Our idea is to make that organization continue doing as much as it can on a human scale and that we will add more areas of restoration thanks to our technologies. We use drones both for image capture and for seeding.
46.	01:12:04:10		NARRATOR: THIS SMALL HILLSIDE IS BEING USED AS A TEST SITE. BY PLANTING SEEDS INSTEAD OF SAPLINGS, THEY SHOULD SAVE TIME AND MONEY.
47.	01:12:14:05		NARRATOR: IMAGING AND SATELLITE TECHNOLOGY HELPS THEM PICK THE BEST AREAS FOR RESEEDING.

48.	01:12:20:00	Na sequência, a gente trabalha justamente com a organização local para se a preparos de terrenos a serem feitos no locais, eles nos ajudarem nessa tarefa.	GREGORY MAITRE: Next, we work together with the local organization to prepare the land, and they help us with this task.
49.	01:12:33:15	Sempre haverá uma parte significativa do processo que tem que envolver as pessoas.	MAURICIO RUIZ: There will always be a significant part of the process that has to involve people.
50.	01:12:40:10		NARRATOR: THE TEAM PREPARES 58 DIFFERENT SPECIES OF SEEDS FOR PLANTING. EACH SEED IS ENCASED WITH THE SPECIFIC NUTRIENTS, BACTERIA, AND FUNGI THEY'LL NEED TO GROW.
51.	01:12:51:09	Nós desenvolvemos o próprio material da cápsula em função do solo que vai recebê-la.	GREGORY MAITRE: We developed the capsule material to be based on the soil that will receive it.
52.	01:13:01:20		NARRATOR: THEN, IT'S TIME TO TAKE TO THE AIR FOR THE HIGH-TECH DRONE DISPERSAL. MORPHO HAS SEEN A SPROUT-RATE OF ABOUT 80% IN PAST DRONE PROJECTS.
53.	01:13:14:07	E nossos últimos drones conseguem carregar até 40 quilos de sementes de uma vez só Cada drone consegue semear até 50 hectares por dia.	GREGORY MAITRE: Our latest drones can carry up to 40 kilos of seeds at once. Each drone can sow up to 50 hectares per day.
54.	01:13:25:07		NARRATOR: THAT'S 50 TIMES MORE THAN ONE PERSON COULD DO.
55.	01:13:29:10	Nós plantamos bastante rapidamente em função desse e	GREGORY MAITRE:

		desses drones, mas nós voltamos, na verdade, pelo -1 vez por ano, para poder acompanhar in loco como vai evoluindo aquela plantação.	We planted quite quickly but we come back, in fact, once a year, to be able to monitor how that planting is evolving.
56.	01:13:42:00		<p>NARRATOR: THE TECHNIQUE HAS ALREADY BEEN SUCCESSFUL IN GABON AND FRENCH GUIANA. THERE, A FORMER MINING ZONE WENT FROM LESS THAN 1% TO 55% VEGETATION COVER IN JUST 1 YEAR.</p> <p>IF THE TEST RUN WORKS AS WELL HERE, MAURICIO AIMS TO DEPLOY IT ACROSS THE WHOLE ATLANTIC FOREST CORRIDOR.</p>
57.	01:14:05:03	Essa parceria entre um bom exemplo de como a gente pode juntar tecnologia, mas mantendo a mão de obra.	<p>MAURICIO RUIZ: This partnership is perhaps a good example of how we can combine technology, while maintaining the workforce.</p>
58.	01:14:13:09		<p>NARRATOR: BEFORE WORKING WITH MORPHO ITPA HAD PLANTED OVER FOUR AND A HALF <i>MILLION</i> TREES.</p> <p>THE ADDITION OF DRONES MAY BRING MAURICIO'S AMBITIOUS GOALS WITHIN REACH.</p> <p>BUT FOR HIM, REFORESTATION ULTIMATELY DEPENDS ON THE WILL OF THE PEOPLE.</p>
59.	01:14:33:19	Se você não gosta da destruição que está acontecendo no mundo, planta uma árvore na frente da sua casa, no fundo do seu quintal.	<p>MAURICIO RUIZ: We need active people. If you don't like the destruction that is happening in the world, plant a tree in front of your house, in the back of your yard.</p>

		<p>Porque quando a gente sai da imobilidade, sabe, uma coisa muda dentro da gente e é essa coisa que tem que mudar. É exatamente isso que tem que mudar.</p> <p>Cada árvore plantada é uma semente no coração. Então essa é a nossa ação, essa é a maneira como a gente atua.</p>	<p>Because when we come out of immobility, you know, something changes inside us, and that's the thing that has to change.</p> <p>Each tree planted, is a seed planted in the heart. So this is our action, this is how we act.</p>
60.	TRT: 01:15:54:12		END