Episode 4: Cities Under Siege

TIMECODE	STOCK/B-ROLL/	NARRATION /
	SUPERS/GRAPHICS	INTERVIEW/ACTUALITY
	"INFESTATION" Ser "Cities Under Si	
10:00:32		INT – MICHELLE CHEUNG
10.00.32	Stock footage: termites	They work underground. They work where you can't see them. It's already too late.
10:00:36	Stock footage: mosquitoes, cockroaches, coyote, stretcher	INT – KEVIN TAYLOR: They are very good at transmitting diseases, they kill a lot of people worldwide.
10:00:41	Stock footage: coyotes, kid	INT – SUE REID: My biggest fear is that a small child is gonna be attacked.
10:00:45	Stock footage: bed bugs, rats Recreation: victim and bites	INT – SHARON YOUNGER: I have seen such horror stories it was like I had walked into a Stephen King novel.
10:00:51	Stock footage: rats	INT – BOBBY CORRIGAN: We do not want them in our space it's a war it's a constant war.
10:00:56	B-roll: R.A.T.S in alley	ACTUALITY – R.A.T.S Here here here!
I"	nfestation" / "Cities Under	Siege" Title Card [10:00:59]
10:01:04	Stock footage: Aerial of city lights at night, sunset, cloud time lapse, time lapse pedestrian crossing and escalator, London tube tunnel, low angle dolly skyscrapers, alley, rats, termite, bed bug, cockroaches, coyote, mosquito, drive by suburban houses, crowded street B-roll: electrical socket, garbage	NARRATION: For the first time in human history more than half of us live in cities. And that number is rising. We think of cities as human places, separate from nature. Built by us for us. But there are other residents here. Moving in the shadows of our sprawling urban landscapes, living in the spaces we can't see. These are the opportunistic invaders. The exploding infestations that have come here to prey on our waste on our structures even on us.
BED BUGS		

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[PIX LOCK SCRIPT- SEAMLESS script as of 7/1/2014]

10:01:49	Stock: DDT archival stock, pest control bed bug stock, negative image of bed bug B-roll: child in bed	NARRATION: For fifty years¹ humans thought they had won the war but now one of the world's greatest invaders is back with a vengeance. It inhabits every major city on earth. It lurks waiting to feed on us when we are most vulnerable. When we sleep. It is quite literally the monster under the bed. The tiny elusive and out of control bedbug.
10:02:23	B-roll: Michael at work	INT - MICHAEL GOLDMAN: Bedbugs are the worst pests that the pest management industry has seen in a long time.
10:02:31	Stock: CU of bed bug B-roll: Michael at work	NARRATION: After thirty years in the extermination business pest expert Michael Goldman wasn't prepared for the onslaught of bedbug calls he's had to make.
10:02:42	Stock footage: hotels, movie theatre, library, train station SUPER: MICHAEL GOLDMAN Purity Pest Control	INT - MICHAEL GOLDMAN: We're finding bedbugs everywhere in the city. In apartment buildings in houses in five star hotels, in low end hotels, in movie theaters, libraries, bus stations, trains really anywhere that humans congregate you're gonna find bedbugs.
10:02:59	B-roll: Michael at work	INT - MICHAEL GOLDMAN: Just peel this back. All those black spots are fecal spots and the reason that they're here is because the bedbugs will hide under the seams. There they are. These bedbugs have just fed because they're full of blood so the person who sleeps on this bed would definitely show signs.

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¹ http://en.wikipedia.org/wiki/Bed_bug

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10:03:21	B-roll: bed bugs on mattress, Roger Gold hero shot and in lab Stock: negative of bed bug	NARRATION: Bedbugs have been preying on us for thousands ² , perhaps tens of thousands ³ of years. Roger Gold of Texas A & M University would like to see them eradicated once and for all.
10:03:35	Stock: negative of bed bug	INT - ROGER GOLD: Bedbugs feed on human blood they have a piercing sucking mouth part where they have the ability to penetrate the skin of humans and other animals. And to remove the blood and to use that as a source of food.
10:03:52	Stock: negative of bed bug, baby in crib B-roll: close up of bed bug	NARRATION: These tiny vampires are uniquely adapted to find us. Like a shark smelling blood in the water, bedbugs are first drawn to the carbon dioxide we exhale and then our body heat.
10:04:08	B-roll: close up of bed bug, bed bug on skin, on mattress	INT - MICHAEL GOLDMAN: Bedbugs prefer to feed at night. Usually around three, four, five o'clock in the morning. A bedbug will actually anesthetize the skin and then poke a hole through you so you don't really feel it then what they do is they inject an anticoagulant that allows the blood to flow more freely up the straw. It takes about 5 to 7 minutes before they're sated and then they'll go back to the area where they're congregating and sleep until they're hungry again and then go out looking again.
10:04:41	Stock: curtains, feet stepping on floor, woman getting out of bed, bed bug zig zag bites, bites on neck,	NARRATION: The victim will wake up the next morning with no knowledge of what happened to them during the night

http://en.wikipedia.org/wiki/Bed_bug

http://www.history.com/news/theyre-back-a-bed-bug-history

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	legs B-roll: subway, apartment establishing shot	but very often with itchy welts like these. The perpetrators will be nowhere to be seen and the victim will have no idea what caused their mysterious itchy rash. And that's exactly what happened to the tenants of this apartment building. Sharon Younger had no idea that moving in here would change her life forever.
10:05:17	SUPER: SHARON YOUNGER Recreations: man stumbling down hall	INT - SHARON YOUNGER: When I first came to this building within a week I was awoken by somebody walking down the hall weeping and moaning saying "sleep, sleep I just want sleep". There were dozens and dozens of bugs crawling on his face and through his hair and coming out his ears. And then I noticed his t-shirt. His entire shirt was blood soaked. I didn't realize bedbugs were real. I thought they were just a subject of this nursery rhyme.
10:05:55	Recreations: man stumbling down hall B-roll: Michael making a house call	NARRATION: Bedbugs and their debilitating effects are very real. But even in a heavy infestation the victim may not understand what is happening to them. Because bedbugs are insidious and nearly impossible to detect.
10:06:10	B-roll: Michael making a house call, with his dog	ACTUALITY - MICHAEL GOLDMAN: "Pest control?" INT - MICHAEL GOLDMAN: It's very difficult to find bedbugs. I've been in the pest management industry for 35 years and I'm really only about 35 percent accurate. We use dogs now that are about 95 percent accurate. They're not using their eyes they're using their nose. And the training of the dogs is the same kind of training as bomb detection

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		and drug detection.
		and drug detection.
		ACTUALITY – MICHAEL GOLDMAN
10.05.05	- II M. I. I. I.	"Good boy, this way"
10:06:36	B-roll: Michael making a	NARRATION:
	house call, with his dog, bed	Bedbugs don't just hide in mattresses.
	bugs in tube, bed bugs on wall, light socket	Newly hatched ones are the size of
	Wall, light socket	a pinhead and the adults are no
		bigger than an apple seed. They can
		climb long distances inside walls,
		entering rooms through a light
		socket or any crack the width of a
		credit card, making an infestation in
		a building like this a terrifying
10:07:06	B-roll: apartment	prospect. INT - SHARON YOUNGER:
10.07.00	establishing shot	This building was seventy percent
	Cotabilishing shot	infested, think about that. Seven out of
	Recreation: woman tossing	every ten units had bedbugs in them.
	and turning in bed, bed bug	You can never sleep. You're just about to
	bite on arm	fall asleep, just about to fall asleep, and
		you're woken up by a bedbug bite. This
		is personality changing, this is mental
10:07:31	Ctock had bugs an earnet	health territory.
10:07:31	Stock: bed bugs on carpet, bed bugs on sheet	NARRATION: Pest control experts like Michael
	bed bugs on sileet	Goldman are losing sleep over the
	B-roll: Michael at work	bedbug invasion because every
		single case is a battle with an
		uncertain outcome.
10:07:42	B-roll: Michael at work,	INT - MICHAEL GOLDSMITH:
	baseboards, CU of bed bug,	If there's a bedbug underneath a
	on mattress	baseboard and we go ahead and spray
		the baseboard the bedbug will most likely
		retreat deeper into the baseboard and in
		between the walls and will go to sleep. We think well what a great job we did
		because the homeowner's not having any
		more problems but in fact they're in the
		walls waiting to come out again. Bedbugs
		can live well over a year without a blood

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[PIX LOCK SCRIPT- SEAMLESS script as of 7/1/2014]

		meal so three, four months later the bedbugs will awaken and get a blood meal and start living their life again.
10:08:12	B-roll: bed bugs on mattress	NARRATION: Bedbugs are notoriously hard to eradicate even if all the bugs are killed by a treatment, eggs left behind will hatch months later and
10:08:25	Stock: DDT commercial	restart an infestation. ARCHIVAL: "It's so easy to apply because of a new efficient dispenser packet yes it gets in where DDT can really do a thorough job."
10:08:35	Stock: DDT commercial	NARRATION: In the 1940s and 50s ⁴ the insecticide DDT all but eradicated bedbugs from much of the Western world. But even before the chemical was banned for harming people bedbugs around the world were already becoming resistant.
10:08:55	B-roll: Roger Gold in lab – heat treatment	Roger Gold's research has confirmed that there is only one effective weapon to kill both bedbugs and their eggs. Heat. One hundred and forty degrees ⁵ and above can end the nightmare at last. ACTUALITY – ROGER GOLD They're all dead.
10:09:18	B-roll: kid in bed, close up of book Stock: pest control heat treatment, CU of bed bug, woman shopping	It's simple to do in a lab but to rid a house of an infestation the entire structure and all of its contents need to be heated for four hours or more. These treatments cost thousands of dollars and are the only effective option. So keeping

⁴ http://www.cdc.gov/nceh/ehs/publications/bed_bugs_cdc-epa_statement.htm 5 http://www.goldsealpest.com/bed-bug-removal

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		bedbugs from crossing your doorstep is the key but that's easier said than done. Bedbugs can arrive hidden in the binding of a library book or even in your shopping bag from a high-end boutique.
10:09:53	Stock: hotel bed	INT - MICHAEL GOLDSMITH: People ask me what can I do when I leave the house how do I make sure I don't bring them home and there's no easy answer to this you just have to do the best you can. When you go to a hotel before you unpack your bags check the bed. Look for fecal spots look for exoskeletons look for live bedbugs.
10:10:11	Stock: luggage out of trunk	INT - MICHAEL GOLDSMITH: I would strongly suggest that when people come back from vacation that they don't bring their luggage into the house leave it outside. Take their laundry put it in a plastic bag take the bag and throw all their laundry into the dryer and let it run for about 20 minutes and that will kill all stages of the bedbugs.
10:10:29	B-roll: Michael at work, pan up to kids bed	NARRATION: It will take this sort of vigilance to keep bedbugs from spreading even further worldwide. But the monster under the bed is far from the only threat our cities face.
	COYO	DTES
10:10:45	Stock: time lapse of city, aerials of city and suburban neighbourhood, coyote running across street B-roll: Stanley with tracker	NARRATION: Another larger, more secretive invader lurks just outside our doorsteps. Its numbers are exploding in almost every major metropolitan area in ⁶ North America. Yet many of us don't have a clue that this cunning and stealthy creature is lurking very close by. It

 $^{^{6}\ \ \}text{http://researchnews.osu.edu/archive/urbcoyot.htm}$

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		is the coyote. And the great city of Chicago is infested with them.
10:11:14		INT: STANLEY GEHRT You have thousands of coyotes living among people and the vast majority of people having no idea that they're there.
10:11:25	Stock: city skyline timelapse B-roll: Stanley's hero shot, unloading truck, coyote in cage, close up, releasing coyote	NARRATION: Wildlife biologist Stan Gehrt [GEHR-IT] is trying to decode the mystery of how coyotes not only survive but thrive in America's third largest city ⁷ . Ghert has been tagging and radio tracking Chicago's coyote population for more than a decade. Today he is tracking a young female to determine her territorial range.
10:11:50	B-roll: Stanley tracking from truck Stock: coyote in the bushes, on a lawn, near houses SUPER: DR. STANLEY GEHRT Ohio State University	ACTUALITY - STANLEY GEHRT This is very strong so she's only a few meters away. She's right there, right there. INT- STANLEY GEHRT We were wrong before we began this research we thought that coyote survival would be lower in the city because of all the threats that we pose towards them but it turns out the opposite is true. We're seeing a thriving urban population with incredible growth rates. Exponential growth. Our best guess in terms of the number of coyotes that live in the Chicago area is eight thousand.
10:12:24	Stock: time lapse of Chicago canal, aerial of highway overpass, dead coyote, coyote in the wild, close up of eyes	NARRATION: Chicago is a maze of busy streets and highways so experts assumed that most coyotes would end up as road kill but they misjudged the coyotes acute eyesight, keen sense of smell and most importantly - their astonishing intelligence.

⁷ http://en.wikipedia.org/wiki/Chicago

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40.40.44		THE STANKEY OF UP
10:12:44	Stock: close up of coyote	INT- STANLEY GEHRT
	eyes, coyote crossing road,	They learn how to judge speeds of
	in the wild, in the snow	vehicles they've learned which direction
		to turn to look for oncoming traffic.
	B-roll: traffic, traffic light	We've also been able to watch them
	,	cross very busy streets by using traffic
		lights so they know that when the traffic
		stops at an intersection that that's the
		time that they need to cross. They're
		very quick to learn and that's what
		makes them so successful at being able
		to exploit a wide range of habitats. Pretty
		much every habitat in the world coyotes
		are capable of being extremely successful at.
10.12.17	Charles assist of site. Canada	
10:13:17	Stock: aerial of city, Canada	NARRATION:
	geese, cat, eating a bird,	And Chicago is no exception. There
	Mike and dead coyotes,	is a bounty of prey to hunt for this
	coyote in the bushes	dangerous, wild, predator.
		Mike Flick was sixteen when he took
	B-roll: Mike Flick shooting,	aim at his first coyote. Now as
	unloading gear	owner of Anytime Animal Control
		he's the go-to man when coyotes
		threaten livestock in rural Illinois.
		But Mike was surprised when he
		started getting more and more calls
		from within Chicago's city limits. A
		place he can't fire his rifle. He
		knows full well why the coyote
		population has boomed.
10:13:58	B-roll: Mike Flick driving, in	ACTUALITY - MIKE FLICK
	the woods, POV to street	A coyote could hide in your garage and
		you wouldn't know about it. Look at all
	Stock: POV driving through	this. It's beautiful. You know this place is
	suburban neighbourhood,	utopia for coyotes. Here you've got fruit
	geese, bird eggs, aerial	trees, animal dishes, garbage day is a
		feast. We've got a golf course with a golf
		course comes ducks and geese. They'll
		take the eggs that's easy.
		We offer them everything they need and
		they take it.
		This is actually a great spot for coyotes.
	1	This is actually a great spot for coyotes.

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		We've got everything we need. We've got cover here, it's nice and shaded on a hot day. It's hidden from anything that would harm their pups. If you didn't know better from this area you would think we were in the middle of a forest but we're in the middle of a Chicago suburb and this is where they live.
10:14:53	Stock: aerial of suburban neighbourhood, dog chasing ball, cat B-roll: dog running, on porch	NARRATION: Most of the city coyotes live in packs. Each claiming and fiercely defending a territory. And that's bad news for our pets. To a coyote a cat is just a potential meal. But they instinctively see a dog, a rival canine as a threat.
10:15:13	B-roll: REID household at night, dogs being let out, looking outside	INT- STANLEY GEHRT We have observed a lot of our coyotes when we're radio tracking them watching our pets and watching us taking them on walks or especially watching our back doors.
10:15:30	B-roll: pet dogs in backyard	NARRATION: Sue REID never imagined that her back yard was under surveillance.
10:15:37	B-roll: Sue looking outside, dogs in the backyard SUPER: SUE REID	INT - SUE REID: I had seen a coyote about seven years ago but that was the first coyote I had ever seen and then I'd never seen another one. Jake and Floyd would walk in the morning and then later on at night they usually would like to go out. Usually before it was too dark and I let both of them out and I was usually out with them.
10:15:56	B-roll: Sue's back porch, dogs outside	NARRATION: The coyotes knew this pattern well and had been waiting for their chance to strike.
10:16:05	B-roll: Sue opens door	INT - SUE REID: I heard the yelps within seconds after I let them out and I ran out there and I

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		, ,
		threw my cell phone at them first and
		just ran after them. I didn't even think
		about that there was six coyotes in my
		yard I just wanted to save my dogs.
10:16:17	SUPER: KENDALL REID	INT - KENDALL REID:
		I saw two coyotes running into the yard
		and Jake standing there and I knew
		Floyd was gone, I just knew.
10:16:26		INT - SUE REID:
		All three of us went back out to the yard
		to look for Floyd and we couldn't find
		him.
10:16:32	B-roll: dog on porch	NARRATION:
		Jake was seriously injured but
		survived the attack. Floyd was not
		so lucky.
10:16:41		INT - KENDALL REID:
		My parents sat me down and told me
		they found the remains of him. And that
		was the hardest thing I've ever heard in
		my life because pets are more than just
		pets.
10:17:02	Stock: coyote in city alley, in	NARRATION:
10.17.102	the wild, barking	As coyotes infest more and more of
	and may barraing	our neighbourhoods they are
		adapting to us. It is in their nature
		and it poses a serious danger.
10:17:14	Stock: coyote looking at a	INT- STANLEY GEHRT
10.17.11	house, stalking, growling,	One of the traits of a very intelligent
	attacks camera	animal like a coyote, is that even though
	attacks carriera	they may start off with a healthy fear of
		people, they constantly test that
		envelope just a little bit, they watch our
		response. If we give the wrong kind of
		cues to a coyote such as if a coyote steps
		forward we step back or especially if we
		turn and we run then a coyote quickly
		learns that it can get rid of people by
		approaching them rather than running
		away. When coyotes become or they
		think they're dominant toward people
		that's when conflicts occur. And it's often

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		when you can have an attack.
10:17:52	Stock: kid in yard	INT - SUE REID:
10117102	Second Ind III yard	We used to feel safe in our home and in
		our yard and we just don't anymore. My
		biggest fear is that a small child in one of
		these yards in our neighbourhood's going
		to be attacked and when there's six of
		them I think they're going to be brave
10:18:05	Stock: sovotos roaming	enough to go after a kid. NARRATION:
10.16.05	Stock: coyotes roaming	Attacks on humans are rare but they
		do happen. Can we reclaim our city
		neighbourhoods from the invading
10:18:20	Stocky class up of sovets	coyote? That is next to impossible. INT- STANLEY GEHRT
10.16.20	Stock: close up of coyote	We've never been successful at
	eyes	
		eradicating coyotes from any system any
		kind of habitat anywhere in North
		America. Coyotes have been the one
		wildlife species that are successful
10 10 20		regardless of what we do.
10:18:38	Stock: pan aerial of city	NARRATION:
	highway and sprawl	While coyotes are laying claim to
	D rolly close up of houses	the spaces outside of our homes, another silent invader is attacking
	B-roll: close up of houses	our houses from within.
	TERM	AITES
10:18:49	Stock: aerial of suburban	NARRATION:
10.10.49	neighbourhood, drive by	A relentless infestation is hitting us
	houses	where we live. Threatening to
	nouses	
	P roll, houses termites	destroy our homes all together. It
	B-roll: houses, termites	comes up unseen through the ground and works like a cancer
		eating away at our houses' bones. It
		can progress for years undetected.
		This insatiable scourge is the termite.
10:19:16	R-rolly termited house	INT - TIM MYLES:
10.13.10	B-roll: termites, house floorboards	
	Hoorboards	In a heavily infested house you can have hundreds of thousands to millions of
	CUDED, DD. TIMOTUV	
	SUPER: DR. TIMOTHY	termites tunneling behind the drywall

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	MYLES Termite Control Officer	behind the plaster continuously eating away at the house until you open up those walls and literally you can take individual boards and there's really nothing there. It just crumbles in your hand. The whole thing.
10:19:35	B-roll: termites, CU of houses Stock: warehouse of wood planks	NARRATION: Termites eat dead plant matter. Mostly in the form of wood. Which happens to be the primary material we use to build our homes. Worldwide termite infestations cause more damage than fires and floods combined ⁸ . But often a homeowner won't know there's a problem until it's too late.
10:20:00	B-roll: termites	INT - DOUG EARL: Before we bought the house we didn't know there was a possibility that there were termites. We didn't know that this was a termite area at all.
10:20:07	Stock: aerial of Toronto B-roll: eaten wood	NARRATION: Doug Earl and his wife Michelle found their dream home in an older Toronto neighbourhood. They never imagined that there was a nightmare waiting inside.
10:20:18	SUPER: DOUG EARL Stock: termite damage	INT - DOUG EARL: We lived here for a few years we had a tenant in the basement and one day she came to us and said I've seen a little black mark on the ceiling and I think it's a termite. We called in an expert and sure enough we had a termite infestation.
10:20:34	Stock: termite damage	NARRATION: The termites had been at work for a long time.
10:20:38	Stock: termite damage and infestation	INT - MICHELLE CHEUNG: They're horrible they're like little tiny

⁸ http://www.termite.com/termites-usa.html

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		maggots. They work underground they work in the darkness they work where you can't see them and once that damage is visible it's already too late. You've got an infestation.
10:20:52	Ctooks tormite damage and	
10:20:52	Stock: termite damage and spraying	INT - DOUG EARL: We ended up having to gut our basement to get rid of the termites and the experts sprayed the wood inside the basement walls and they also drilled into the ground around the perimeter of our house and shot huge amounts of termite killer in there. And so you know, we thought at that point great they've got rid of the termites that's the end of that
		and we don't have to worry anymore.
10:21:15	B-roll: close up of house	NARRATION:
	exteriors, termites	But you can't let your guard down in
	,	a termite-infested neighbourhood.
	MAP of termite spread	Especially now that global warming
	[01:21:23-01:21:35]	is helping them to spread. Termites
	[content of the content of	thrive in warm and humid climates.
	Stock: Kensington market	As temperatures rise so do the
	Coo and the meaning continuous	termite populations. Even as far
		north as Ontario. There are over one
		thousand infested city blocks in the
		Toronto ⁹ area alone, costing local
		home owners over one hundred and
		twenty million ¹⁰ dollars every year.
10:21:48	B-roll: termites	INT - DOUG EARL:
10.21.10		Fast forward a number of years, my wife
	Stock: termite damage	and I got jobs overseas for eighteen
	Stock terrific damage	months.
10:21:53	SUPER: MICHELLE CHEUNG	INT – MICHELLE CHEUNG:
		We're moving back into the house and I
		actually walked into the office I was
		moving boxes in there and I realized the
		floors were soft.
10:22:01		INT - DOUG EARL:
	I	1 =

⁹ http://www.bluwoodcanada.com/hidden.html
10 http://www.torontosun.com/2011/08/06/termites-munching-through-to

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		That's when the penny started to drop
		that we probably had a bigger infestation
		than I originally thought.
10:22:08	B-roll: termites in lab	NARRATION:
10.22.00	b ron: terrines irridb	Termite control expert Tim Myles
		has been battling these tiny insects
		for 20 years. He knows how hard
		they are to defeat.
10:22:18	B-roll: spraying, termites	INT - TIM MYLES:
	z rom opraying, commes	These kinds of chemical treatments
		things even though they're very costly
		the termites still manage to evade it.
		What if there are two or three tiny little
		tunnels that the chemical barrier didn't
		get to. They immediately reroute to
		those two or three tiny little tunnels.
10:22:35	Stock: termite damage and	NARRATION:
10:22:00	construction	The Earl's second infestation
		required a full gut job to both floors
		of the house.
10:22:42	Stock: termite damage and	INT - DOUG EARL:
	construction	The effort that we've put into getting rid
		of the termites in this infestation has
		been enormous and we don't want that
		to happen again.
10:22:51	B-roll: Joe at work	NARRATION:
		Doug was forced once again to call
		Joe the Exterminator. Who is not at
		all surprised to be back in the
		neighbourhood.
10:23:01	SUPER: JOE BRUNO	INT - JOE BRUNO:
	S.N.AP. Pest Control	Typically when I come to a house like
		this I'm looking at the neighbourhood
		and I mean you're going to get an
		infestation I mean it could be running
		underneath the street, under the
		sidewalk in all of the grass, right through
		in the trees there's a massive colony here
		it's not just one house there's going to be
		five, six, ten houses in the entire
		neighbourhood this little pocket here is
		totally infested.

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10:23:25	B-roll: Joe and Doug going to the basement, backyard	NARRATION: Any dead wood on Doug's property is food for the colony.
10:23:30	B-roll: Joe inspecting	INT - JOE BRUNO: I see here Doug that um, you have a shelter tube has formed here and very indicative of termites working.
10:23:38	B-roll: Joe inspecting	INT - DOUG EARL: So you think there's termites inside that tree right now.
10:23:39	B-roll: Joe inspecting	INT - JOE BRUNO: Oh absolutely guaranteed.
10:23:42	B-roll: termites	NARRATION: Termites are constantly scouting in every direction for more wood to eat.
10:23:48	B-roll: Joe inspecting	INT - JOE BRUNO: Hey Doug I see you have some railway ties submerged in the soil yeah that looks like termites and it looks like they're going to follow that seam all the way up there you know gradually getting towards your house.
10:24:05	B-roll: Joe injecting termiticide	NARRATION: Joe injects "termiticide" into the ground all around Doug's house in an attempt to create a continuous barrier to keep the termites out. This treatment will have to be repeated every year to be effective if it actually works at all.
10:24:24		INT - DOUG EARL: It's a scary feeling knowing that there's you know insects around your house at all times that could come in and you know eat the single biggest investment we've ever made in our lives.
10:24:37	B-roll: Tim in lab	NARRATION: Tim Myles is looking at the bigger picture - the end game in the war on termites.

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10.24.44	B-roll: Tim in lab	INT TIM MVI EC.
10:24:44	ס-וטוו: ווווו ווו ומט	INT - TIM MYLES:
		If we want to manage termites on an
		area wide basis in some cases eradicate
		them from entire neighbourhoods and
		cities then we need to be attacking the
		colony somehow actually killing that
10.24-56	D walls Time in Gald	population.
10:24:56	B-roll: Tim in field	NARRATION:
		Tim has developed a Trojan horse attack. It starts with hundreds of
		tasty corrugated cardboard rolls buried in termite-infested earth.
		The termites are given a month to
		discover the rolls and get munching.
10:25:14	B-roll: Tim in lab	INT - TIM MYLES:
10.23.17	D TOIL THIT HI IAD	This was a healthy colony just collected
		yesterday from the field in this box I've
		got nearly 14000 termites.
10:25:23	B-roll: Tim in lab	NARRATION:
10.23.23	D TOIL THIT HI IAD	The live termites receive a coating
		of a chemical called zinc borate. It's
		terminally toxic to termites but it
		won't kill these ones, yet. First
		they'll be reintroduced to the
		colony.
10:25:38	B-roll: Tim in field, termites	INT - TIM MYLES:
		So there are tunnels going out the
		bottom of this trap into the ground. So
		we want these treated termites to
		interact with those untreated termites so
		we get an increased kill ratio. We want
		each one of these to kill maybe ten to a
		hundred others.
10:25:56	B-roll: termites	NARRATION:
		The poisonous zinc borate is then
		spread through the colony because
		of an important social behaviour of
		termites.
10:26:03	B-roll: termites	INT - TIM MYLES:
		They're very clean. And so if they detect
		that a nest mate has something on its
		body they will instinctively stop whatever

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		else they're doing and lick him off.
10:26:13	B-roll: termites	NARRATION:
10.20.13	b rom termites	Every termite that ends up ingesting
		zinc borate will die.
10:26:19	B-roll: Tim in field	INT - TIM MYLES:
10120125		And we'll do this on hundreds of traps
		throughout several blocks for several
		years and we've been seeing about 25%
		suppression per year using this method.
10:26:31	B-roll: termites	NARRATION:
10.20.51	b rom terrintes	It's not the magic bullet that
	Stock: aerial of warehouses	infested homeowners are wishing
	Stocky derial of Warehouses	for but it's a battle won in the
		endless war against this hungry
		horde. But this isn't the only hungry
		horde afflicting our cities.
	COCKRO	
10:26:50	Stock: city street time lapse	NARRATION:
	at night, driving through	There is an ancient infestation in
	streets, crowded alley in	every city around the world that
	Japan, cloud time lapse, lava	affects us all. Common creatures
	flowing, clouds over moon,	that can cause a national level
	cockroaches	athlete to gasp for air. They have
		called earth home for more than
	B-roll: Michael Kemp	three hundred million years ¹¹ ,
	running, using puffer, sewer	predating the dinosaurs ¹² . They are
		the cockroach. The ultimate
		survivor.
10:27:19	Stock: cockroach	INT - COBY SCHAL:
		So you can cut the head off the
		cockroach and the cockroach can
		continue to live for many hours and
		sometimes days.
10:27:26	Stock: close up of	NARRATION:
	cockroach, cockroach	There are more than four thousand
	species, cockroaches in alley	species ¹³ and cockroaches inhabit
		every climate on earth. Part of their
		amazing success is their
		reproductive rate.

¹¹ http://news.discovery.com/animals/cockroach-ancestor-predates-dinosaurs.htm http://en.wikipedia.org/wiki/Dinosaur 13 http://www.uky.edu/Classes/ENT/574/insects/homes/Cockroach/roach.htm

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[PIX LOCK SCRIPT- SEAMLESS script as of 7/1/2014]

40.07.44		THE CORY COLLE
10:27:41	Stock: cockroaches	INT - COBY SCHAL:
		Females store sperm for their lifetime so
		all they need to do is mate once and for
		the rest of their lifetime they can
		reproduce progeny.
10:27:50	B-roll: Coby Schal hero shot,	NARRATION:
	Coby in lab	Coby Schal at North Carolina State
		University has a lot of respect for
		his worthy adversary, the
		cockroach.
10:28:00	B-roll: Coby in lab	INT - COBY SCHALL:
	,	We have this ongoing arms race with
	Stock: close up of cockroach	cockroaches we keep alternating
	eating a grape	between us developing an innovative
		strategy and a cockroach developing an
		adaptation and we have to come back
		with a new insecticide or a new approach
		to kill the cockroach.
10:28:17	B-roll: cockroach in lab,	NARRATION:
10120117	team in lab, time lapses	Coby Schal and his team have
	team in last time lapses	demonstrated just how resilient the
		cockroach is. For decades humans
		have fought cockroaches by adding
		glucose, a simple sugar, to
		insecticides to attract and kill them
		but the cockroach has fought back.
		Evolving to now reject the sugar
		laced insecticides.
10:28:41	B-roll: cockroach experiment	INT - COBY SCHAL:
		The glucose tastes bitter to them. When
		glucose is coupled with an insecticide
		bait the cockroach then refuses to eat
		the bait and therefore we cannot kill that
		cockroach.
10:28:54	B-roll: Michael running	NARRATION:
		Michael Kemp was a national level
	Stock: Toronto bridge,	runner in peak physical condition
	subway	when he moved into his university
	7	residence.
10:29:04	Stock: Toronto apartments,	INT - MICHAEL KEMP:
	cockroach in toaster	It was a nice building. Looked clean
	cockroach in toaster	It was a nice building. Looked clean when you walked in. It was perfect for

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	B-roll: hallway	college students. We thought that this would be a good place to live. I had never seen a cockroach before but I remember one night coming to the kitchen for a glass of water turning the light on and seeing a couple of cockroaches disappear. At first we thought it was an isolated incident there may have just been a few it wasn't a big deal.
10:29:33	Stock: cockroach SUPER: DR. COBY SCHAL North Carolina State University	INT - COBY SCHAL: Generally if you see one cockroach in your kitchen there are probably lots more that you can't see.
10:29:41	SUPER: MICHAEL KEMP B-roll: cockroaches, infested kitchen	INT - MICHAEL KEMP: Over the next month or two we started seeing them more frequently. We would turn on the light and there would be 15 or 20 cockroaches all scurrying away trying to hide from us but we didn't realize how bad the problem was.
10:29:58	B-roll: cockroaches, infested kitchen	NARRATION: In less than a year a single female cockroach can produce a million eggs ¹⁴ .
10:30:05	B-roll: cockroaches, infested kitchen	INT - MICHAEL KEMP: After a while we stopped eating anything that wasn't sealed inside the fridge because there was cockroaches everywhere especially in the kitchen.
10:30:14	Stock: cockroaches on plate	INT - COBY SCHAL: As long as there's water, food, the proper temperature and lots of places to hide cockroaches do great.
10:30:22	Stock: cockroach infestation	INT - MICHAEL KEMP: And I opened the cupboard door and it was completely full of cockroaches. There would be hundreds of them. When I flipped my futon over I discovered that

¹⁴ http://lancaster.unl.edu/pest/roach/roach3eng.pdf

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		the entire bottom of my futon was
		covered in cockroach larvae.
10:30:40	Stock: cockroach infestation	NARRATION:
		What a cockroach infestation leaves
		behind is what can make them
		deadly.
10:30:48	B-roll: cockroach infestation,	INT - MICHAEL KEMP:
	Michael running	At the time I never even really thought
		about the fact that the cockroaches were
		leaving feces in our apartment that I may
		be allergic to.
		I've had asthma since I was a kid but it
		really started getting bad the time that
		we were living in the apartment. I had no
		idea that there was any link between
		that and the infestation of cockroaches.
10:31:13	B-roll: Michael running	NARRATION:
		Michael's lungs were soon fighting
		for air. People with asthma are
		highly sensitive to cockroach
		allergens ¹⁵ and children under the
		age of ten are especially vulnerable.
10:31:29		INT - COBY SCHAL:
		There have been some very serious
		cases of asthmatic responses to
		cockroaches in some cases cockroaches
		result in anaphylactic shock which can
10.21.10		result in death.
10:31:40	Stock: ambulance down	NARRATION:
	street, city aerial	And these aren't just isolated
	Dually Caby in Sald lifting	incidences. Look beneath our
	B-roll: Coby in field lifting	streets and our modern cities are
	sewer	virtually floating on a sea of cockroaches.
10:31:54	R-roll: Coby in field lifting	INT - COBY SCHAL:
10.31.34	B-roll: Coby in field lifting sewer	When it then moves from the sewer
	SCAACI	system into our kitchen it then defecates
	Stock: cockroach on plate	and so these bacteria that it ingested are
	Stock, cockloder on plate	then defecated on our food.
10:32:06	Stock: cockroach, IV	NARRATION:
10.52.00	Stocki Cocki odci ij 1 v	11/11/11/11/11

¹⁵ http://www.aafa.org/display.cfm?id=9&sub=22&cont=312

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		And the excrement of cockroaches can carry disease. Hitting us where we are most vulnerable.
10:32:15		INT - COBY SCHALL:
		In environments where antibiotic
		resistant microbes are generated and
		proliferated such as in the hospital a
10:32:26	Stocky cockroaches on plate	cockroach infestation is very dangerous. NARRATION:
10.32.20	Stock: cockroaches on plate,	
	patient in hospital	They transfer these deadly microbes on the surface of their bodies to
		catastrophic results.
10:32:37	B-roll: Michael running,	NARRATION:
10.52.57	using puffer	Having experienced a cockroach
	doming particle	infestation first hand Michael is
		years later, still feeling the lasting
		effects.
10:32:48	Stock: cockroach infestation	INT - MICHAEL KEMP:
		When we first saw cockroaches we only
		saw a couple of them and within a few
		months there were thousands of them
		within six months there were tens of
		thousands of them. If you see a
		cockroach I'd be worried.
10:33:04	B-roll: cockroaches in lab	NARRATION:
		Cockroaches make us squeamish.
	Stock: city night aerial	But another incredibly resilient city
		dweller repulses us. An infestation
	RA ⁻	better described as a plague.
10:33:17	B-roll: R.A.T.S in alley with	NARRATION:
10.55.17	dogs	These volunteers have brought out
	4093	hunting dogs to this rainy, New
		York City alley, for a single purpose.
10:33:25	B-roll: R.A.T.S in alley with	ACTUALITY - R.A.T.S
	dogs	"Let's get em" "Good boy!" "Rats a
		poppin'!"
10:33:30	B-roll: R.A.T.S in alley with	NARRATION:
	dogs	To kill as many rats as they can.
10:33:34		INT – ROBERT CORRIGAN:
		We do not want them in our space. It's a

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		war it's a constant war with rats in our cities.
10:33:40	B-roll: Robert hero shot, Robert in the NYC streets	NARRATION: Doctor Robert Corrigan has been fighting that war for over twenty years. As one of the world's leading experts in rodent control he knows what we're up against.
10:33:52	SUPER: DR. ROBERT CORRIGAN Urban Rodentologist Stock: Rat in tunnel, toilet bowl	INT - ROBERT CORRIGAN: It is a war because we want to protect our own health. Rats transmit diseases. If they go from a sewer from a ditch where there's a bacterium that can hurt us they can follow the sewer line up into a building and emerge through a toilet bowl. And you have now a rat in the living quarters of a family.
10:34:11	Stock: Rat climbing out of toilet, around kitchen sink, bubonic plague paintings, rats fighting, rats eating dead rat, rat emerging from hole in wall	NARRATION: Rats can invade our homes and make us sick. It's a reputation that the rat earned a long time ago. During the middle ages rats were responsible for spreading the bubonic [bew-bon-ick] plague which killed one out of three people in Europe ¹⁶ . The horror of those times is still burned into our cultural memory. Today we can control the plague but not the rats who carried it. Nearly seven hundred years later they still run rampant in our cities.
10:34:50	B-roll: Ryan in alleys	NARRATION: To New York City exterminator Ryan Tai the cause of the infestation couldn't be more obvious.
10:34:58	B-roll: Ryan examining garbage, rats in garbage, NYC alleys	INT - RYAN TAI: This garbage is not being placed in proper garbage cans so you see people just throw these bags of garbage down

¹⁶ http://en.wikipedia.org/wiki/Plague_%28disease%29

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		here and the rats they come in here and they start eating this garbage because it's all food garbage. Rats live close proximity to human beings because they feed off our waste. They eat what we eat so the more people we have the more garbage we create the more food there is for the rats to feed on.
10:35:22	B-roll: garbage in alley Stock: time lapse of people on sidewalk	INT - ROBERT CORRIGAN: In cities the average person discards about 5 pounds of trash in 24 hours. So if you have ten million fifteen million people in a city that's a lot of food being put out at night.
10:35:33	B-roll: garbage and rats in alleys	NARRATION: Our waste turns city streets and alleys into a banquet hall for rats, which makes it very difficult to control them with traditional methods.
10:35:45	B-roll: rat bait traps, Ryan in field	INT - RYAN TAI: These are the bait stations that we use that we put the rodenticide in to kill the rats.
10:35:50	B-roll: rat bait	NARRATION: It's a highly effective and lethal solution. If the rats take the bait.
10:35:57	B-roll: setting the rat bait, garbage in alley SUPER: RYAN TAI	INT - RYAN TAI: It takes about 72 hours for the poison to take effect. The problem is a lot of times the rat doesn't eat the poison because they eat the food that people leave behind.
10:36:06	B-roll: close up of rats on street	NARRATION: And if those rats don't take the bait life in the neighbourhood can be truly frightening.
10:36:13	SUPER: JOHN DELUTRO Café Palermo	INT - JOHN DELUTRO When you close up at night the garbage is laid out on the sidewalk they come out a foot long not one or two rats they

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	Stock: flashlight shining on swarm of rats	come out by the dozens. Every night when I go home I gotta walk in the middle of the street with a bat because they're all over the sidewalk.
10:36:30	Stock: Rats eating off ground	INT - JOHN C. CASHLINUOVO After 8 - 9 o'clock when the street quiets down this turns into a field of rats here. I mean herds of rats.
10:36:40	Stock: group of rats eating grain, flashlight shining on swarm of rats B-roll: R.A.T.S in alley	NARRATION: And it's when conditions get this bad that this crack squad of specially trained terriers gets called in, to kill rats.
10:36:50	B-roll: R.A.T.S in alley SUPER: RICHARD REYNOLDS R.A.T.S	INT - RICHARD REYNOLDS: These dogs are doing what their job descriptions in life have been for four hundred or five hundred years.
10:36:57	B-roll: R.A.T.S in alley	ACTUALITY - R.A.T.S: "Here here, here here! Get him get him! Get him get him! Good dog good dog!"
10:37:04	B-roll: Bait trap in alley	NARRATION: Terriers were first bred in the castles and towns of medieval Europe ¹⁷ for this very job. And it is no less important today, here, in New York.
10:37:15	B-roll: R.A.T.S in alley, dead rats	INT - RICHARD REYNOLDS: What we do tonight will have an effect on the numbers of rats next year. A single pair of rats over a period of a year starting with one pair of rats on that tray tonight and if they weren't dead there'd be 24 thousand rats at the end of the year.
10:37:29	Stock: Rats eating dead rat, rat nest and babies	NARRATION: It's impossible to know their real numbers but estimates suggest one rat for every human in New York City ¹⁸ . And it's not just their prolific

¹⁷ http://en.wikipedia.org/wiki/Rat_Terrier
18 http://www.abc.net.au/tv/documentaries/stories/s603439.htm

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		reproduction that makes them hard to eradicate.
10:37:44	Stock: rat feeding, jumping	INT - ROBERT CORRIGAN: It's very cunning it's even been called diabolically clever by scientists it learns quickly from its mistakes and it learns how to maneuver and plan its activities.
10:37:56	B-roll: rat in subway tracks, sewer	NARRATION: And the city provides plenty of ways to get around starting with the subway and sewer.
10:38:03	B-roll: Ryan looking at sewer, sheet metal	INT - RYAN TAI: As you can see these grates have slots so basically if the head can fit through the slot the entire rat can fit through it. One of the ways that some of the tenants or the building owners have been trying to prevent the rats from coming onto the property is putting up the sheet metal that prevents the rats from climbing from the other side, coming over here to look for food.
10:38:24	B-roll: sheet metal, holes in wooden walls Stock: rat eating and gnawing	NARRATION: Sheet metal may seem extreme but wherever they find a barrier rats will try to gnaw their way through. Their front teeth can grow up to five inches ¹⁹ in one year. As a result their gnawing is constant and compulsive. They chew through wood, cement, bricks, even lead pipes.
10:38:47	Stock: smoke pouring out of house, sparks and fire from buildings, power plants	INT - ROBERT CORRIGAN: The types of damage rats do is extensive. They gnaw on a wire inside a wall causing a spark and that spark literally and has burned down buildings and cost human lives in fact they affected a nuclear power plant in Japan not too long ago by gnawing on electrical

 $^{^{19} \} http://www1.agric.gov.ab.ca/\$ department/deptdocs.nsf/all/agdex816/\$ file/682-2.pdf? OpenElement agric.gov.ab.ca/$ department/deptdocs.nsf/all/agdex816/$ department/deptdocs.nsf/all/agdex816/$ department/deptdocs.nsf/all/agdex816/$ department/deptdocs.nsf/all/agdex816/$ department/deptdocs.nsf/all/agdex816/$ department/deptdocs.nsf/al$

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		wiring.
10:39:06	B-roll: rat at night, in garbage Stock: rat in tunnel, across lit floor Stock: rats on kitchen floor,	NARRATION: Whatever physical damage rats can do to our infrastructure the biggest threat they pose still remains the spread of disease. Could another great plague sweep through our cities carried by rats? INT - ROBERT CORRIGAN:
	rats on kitchen sink, beam of flashlight on pack of rats, rat falls into toilet	The worst case scenario with rats in our city could be another plague if mother nature would throw us a couple of curveballs someday and match up a very virulent pathogen with the rat we're always thinking about that. We need to be vigilant about it.
	MOSQU	
10:39:45	B-roll: pesticide foggers Stock: Mosquitoes swarm around tree, lands on skin	NARRATION: It is a hot mid summer's afternoon and here in the city of Hamilton, Canada just steps from surrounding apartments and homes, a desperate battle is being fought. The enemy - a creature that once plagued the dinosaurs ²⁰ and has been responsible for more human deaths than any organism on the planet. Each encounter is a roll of the dice with the inescapable mosquito.
10:40:17	Stock: B&W Brazillian mosquito footage, CU of mosquito penetrating skin, swarm in nature SUPER: KEVIN TAYLOR Pestalto Environmental	INT - KEVIN TAYLOR: A lot of people think that they're a nuisance but through history mosquitoes have been one of our deadliest foes. They are very good at transmitting diseases they kill a lot of people worldwide and an outbreak can happen in any given season if conditions are right.
10:40:36	B-roll: Kevin in the field	NARRATION: Kevin Taylor is an expert in urban

²⁰ http://en.wikipedia.org/wiki/Mosquito

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	Stock: mosquito larvae, rainfall in the wild, in city, CU of puddle	mosquito control and that's a far more difficult task than you would think. That's because cities make ideal breeding grounds for mosquitoes. Mosquitoes need standing water for their eggs to hatch and grow into larvae. In the wild, rainfall soaks into the earth but in a city, it pools everywhere.
10:41:03	B-roll: close up of roof, pop can, still water, Kevin in field taking samples	INT - KEVIN TAYLOR: It's, it's almost impossible to find every little bit of standing water it can be up in the gutters in your roof it can be breeding in your pop can that's in your back yard it can be breeding in streams it can be in storm water ponds. ACTUALITY - KEVIN TAYLOR So what I want to do is I just want to take a couple samples of the larvae that I've just dipped in here and then I'll take those back to the lab later on to identify.
10:41:31	B-roll: Kevin in lab identifying sample	NARRATION: Identification is crucial. Kevin needs to know if these larvae are going to hatch into harmless nuisance mosquitoes or if they belong to one of the fifteen killer species that spread viral diseases in the Hamilton area ²¹ .
10:41:48	B-roll: close up of roof, pop can, still water, Kevin in field taking samples, sample under microscope	INT – KEVIN TAYLOR: Mosquito identification is not an easy thing to learn. Sometimes the difference between one mosquito or the next is just a couple of different tufts of hair.
10:42:00	B-roll: Kevin in lab, looking at sample through microscope, Edwin in car Stock: virus, mosquito on	NARRATION: But it can mean the difference between a bite that just annoys and itches or one that delivers a deadly virus straight into our blood

²¹ Kevin Taylor Pestalto Environmental Health Services

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	skin	streams. Mosquitoes spread disease by drinking the blood of an infected host then biting another uninfected person. The unsuspecting victims often don't even know they've been attacked and that's what happened to Edwin Patterson in San Antonio, Texas.
10:42:30	B-roll: Edwin and Elizabeth in car, Edwin at home in bed	INT - EDWIN PATTERSON: I was completely healthy there was no medical issues or anything else. I was in
	SUPER: EDWIN PATTERSON	excellent physical condition. My life changed on July the 19 th 2012. I was
	Stock: Ambulance, in	coming out of work about mid way
	hospital	through the parking lot my left leg
	·	collapsed on me. It just went dead.
		About two hours later I started having
		convulsions. My son called 911 and that's
10:42:59	Stock: in hospital	really all I remember. INT - ELIZABETH PATTERSON:
10.12.33	Stock. III Hospital	The doctors didn't know what was wrong
	STOCK: ELIZABETH	with him and when he just kept getting
	PATTERSON	worse and worse and I didn't know what
		to do.
10:43:07		INT - EDWIN PATTERSON:
		They came to her several times and
		asked her if she wanted to take me off
		the breathing machine or what and she would have been justified to turn
		everything off.
10:43:18	Stock: mosquito on skin,	NARRATION:
	disease	What Edwin and his doctors didn't
		know is that he had been bitten and
		infected by a mosquito that was
		carrying a killer neuro-invasive
10-42-22	CURE	attacker. West Nile disease.
10:43:32	SUPER: DR. PETER DASZAK	INT - PETER DASZAK: A neuro-invasive disease is a disease that
	EcoHealth Alliance	gets inside your nervous system and it
	Leoneau Amarice	causes damage to your nerves and you
		brain so even if you survive you might
		end up with memory loss personality

Revised/Transcribed by: Paula Potts as of 2014-07-01 10:50 AM on screen tittles; TBC; PRONOUNCE KEYS; GRAPHICS; COMMERCIALS

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10:43:49	B-roll: Edwin getting out of	change or what looks like a stroke. It's pretty, pretty devastating. INT - EDWIN PATTERSON:
	car	After they found out I had West Nile they pretty much just stopped trying to find ways to treat 'cause there is no way to treat West Nile. Once you've got it you've got it.
10:44:02	Stock: mosquito on skin B-roll: Kevin and team in field	INT - KEVIN TAYLOR: I'm really concerned about next is this grassland area here is really marshy out here.
10:44:09	B-roll: Kevin and team in field Stock: larvae	NARRATION: With no cure for West Nile disease Kevin Taylor's fight against the mosquitoes that carry the virus is his city's last line of defense. Once carrier larvae are identified his team rolls out to apply larvicide to all the stagnant water they can find.
10:44:30		INT - KEVIN TAYLOR: Larvicide is a good tool to eliminate the larvae before they hatch and the population starts to explode.
10:44:38	B-roll: Kevin and team in field with pesticide foggers, driving through neighbourhood Stock: couple at a café, mosquito on skin, baseball player	NARRATION: Despite their efforts a huge number of carrier mosquitoes hatch in the area. And that is when they bring out the big guns. Pesticide foggers. Because with female carrier mosquitoes in the air an outbreak can spread through a city with terrifying speed. And mosquitoes hunt us by detecting the carbon dioxide we emit.
10:45:07	Stock: aerial of baseball diamond, mosquito on skin	INT - KEVIN TAYLOR: If you have people out on a sports field playing a game it's all lit up they'll come from a kilometer away from the woodlands outside of town to get that

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		blood meal.
10:45:19	Stock: swarm of mosquitoes,	NARRATION:
101 10113	airplane landing	But what worries scientists most is
		the mosquito's ability to travel and
		potentially spread new emergent
		diseases.
10:45:30	Stock: time lapse of airport	INT - PETER DASZAK:
		The thing about mosquitoes is they're
		pretty mobile. There's an average of 2.2
		mosquitoes in every plane. It doesn't
		sound a lot but there are hundreds of
		thousands of planes moving around the
		world every day.
10:45:42	Stock: third world hospitals,	INT - KEVÍN TÁYLOR:
	sick kids, mosquito on skin	Besides West Nile virus we have dengue
		fever we have malaria. With
		international travel global warming we
		could easily see some of these diseases
		being transferred up here. We actually
		have some of the mosquito species
		capable of carrying some of these other
		viruses right now.
10:46:05	Stock: crowded street,	NARRATION:
	mosquito on skin	As these emergent diseases sweep
		through our cities all of us will be
	B-roll: Edwin in parking lot	bitten sooner or later. Edwin
		Patterson thinks he was bitten in
		this San Antonio parking lot. A
		single bite that changed his life
10,46,24	D roll, Elizabeth and Eduin	forever.
10:46:24	B-roll: Elizabeth and Edwin at doctor's office	INT - ELIZABETH PATTERSON: I'm hoping that Edwin and I will grow old
	at doctor's office	, , ,
		together and play with our grandkids and hopefully he will be walking.
10:46:34	R-roll: Doctor holping Edwin	ACTUALITY – DR. JOHN MALFER:
10.40.34	B-roll: Doctor helping Edwin	Ready? Come on. Stand up up you got it.
		Feel okay?
		EDWIN: Yea.
		DR. JOHN MALFER:
		Any pain?
		EDWIN: No.
		DR. JOHN MALFER:

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		Okay.
10:46:45	B-roll: Edwin in parking lot	INT - EDWIN PATTERSON: It's kind of weird being back here knowing this is where I might have gotten bitten by that mosquito. It's a pretty humbling experience.
10:46:57	Stock: aerial of cities, pan, third world city, drive through neighbourhood, traffic time lapse, aerial time lapse of people crossing street, Chicago canal time lapse, time lapse of city at night with comet	NARRATION: As humans we think of cities as our domain but as our urban populations explode across the planet, nature is not stopping at the city limits. Increasingly opportunistic invaders are finding food and the conditions to thrive in our downtowns and suburbs. The potential risks to our health and our homes are not going away anytime soon.
CREDITS [10:47:29 - 10:47:59]		