

= Typhoon Helen ( 1972 ) =

Typhoon Helen was the most destructive tropical cyclone to strike Japan during the 1972 Pacific typhoon season . Originating from a tropical disturbance on September 11 near the Northern Mariana Islands , Helen gradually intensified as it moved northwestward . By September 14 , it reached typhoon strength and soon turned northeast towards Japan . Accelerating due to a trough over the East China Sea , Helen rapidly approached the country and made landfall near Cape Kushimoto as a Category 3 equivalent typhoon on the Saffir ? Simpson Hurricane Scale . Later that day , a weakened Helen emerged into the Sea of Japan . After merging with an upper @-@ level low , the storm transitioned into an extratropical cyclone on September 19 and was last noted two days later after moving through southern Hokkaido .

In Japan , Typhoon Helen produced torrential rain , peaking at 790 mm ( 31 in ) in Hokkaido , and damaging winds that caused widespread damage . A total of 4 @, @ 213 homes were destroyed and another 146 @, @ 547 were damaged as a result of flash flooding and landslides . Numerous vessels ran aground due to rough seas associated with the storm , including several thousand ton cargo freighters . In all , 87 fatalities and \$ 102 million in damage was attributed to Typhoon Helen .

= = Meteorological history = =

In early September 1972 , a tropical disturbance developed within a near @-@ equatorial trough near the Northern Mariana Islands . On September 11 , the Japan Meteorological Agency ( JMA ) began monitoring this system as a tropical depression shortly after moving through the island chain . Initially , the system tracked southwestward before turning northwestward along the edge of a ridge . On September 13 , a United States Air Force reconnaissance plane flew into the system and found that it had intensified into a tropical storm . At this time , the Joint Typhoon Warning Center ( JTWC ) began monitoring the newly named Tropical Storm Helen . Additionally , the Philippine Atmospheric , Geophysical and Astronomical Services Administration began warning on the system , assigning it the local name Paring . The following day , Helen attained typhoon status as it turned northward . Subsequently , a deepening trough over the East China Sea caused the typhoon to turn north @-@ northeastward and accelerate .

During the afternoon of September 16 , a reconnaissance plane recorded flight @-@ level winds of 185 km / h ( 115 mph ) . Around this time , surface winds were estimated to be the same , making Helen a Category 3 equivalent on the Saffir ? Simpson Hurricane Scale . Later that day , the storm made landfall near Cape Kushimoto . In Shionomisaki Lighthouse , just west of where the center of Helen passed , a barometric pressure of 955 mbar ( hPa ; 28 @. @ 26 inHg ) was recorded , the lowest in relation to the storm . As the system neared Hokkaido , it slowed down and began a multi @-@ day anticyclonic loop . During this period , it merged with an upper @-@ level low and transitioned into an extratropical cyclone on September 19 . The remnants of Helen then tracked across southern Hokkaido before dissipating just east of the island on September 21 .

= = Impact = =

Prior to the typhoon 's arrival , officials in Japan warned residents of heavy rains . The Japanese National Railways network suspended service to areas threatened by the storm , stranding numerous people . By September 18 , approximately one sixth of the railway service was canceled or delayed .

Throughout the main island of Honshu , areas within 110 km ( 70 mi ) of the storm 's center experienced winds in excess of 120 km / h ( 75 mph ) , leading to considerable disruptions to air , sea , and land travel . The highest gust was measured at 181 km / h ( 112 mph ) in Sumoto . These winds caused a city @-@ wide power outage in Tsu , Mie and scattered outages in Nagoya . Over a substantial portion of the country , the storm produced torrential rains that triggered deadly flash floods . Peak rainfall in Honshu and Hokkaido reached 580 mm ( 23 in ) and 790 mm ( 31 in ) , respectively . In Shikoku , ten people died after a landslide destroyed nine homes in K?chi City .

Across Japan , a total of 4 @, @ 213 homes were destroyed and another 146 @, @ 547 were damaged , leaving at least 3 @, @ 000 people homeless . Roads and bridges sustained extensive damage , with large stretches being washed out . According to police in Tokyo , 140 bridges sustained damage . In Higashimatsuyama , a tornado spawned by Helen destroyed eight homes .

Large swells from the storm caused large vessels to wash ashore , including a 9 @, @ 000 ton freighter in Ise Bay . Twenty @-@ four fishermen drowned off the coast of Hachij? @-@ jima after two vessels sank . Throughout Japan , 322 ships were either damaged or ran aground due to the storm . Including offshore , Helen killed 85 people in Japan . Along the east coast of South Korea , these swells resulted in two fatalities .

On September 17 , the Japanese military was mobilized to assist in relief efforts . In all , 87 fatalities , 158 injuries and \$ 102 million in damage was attributed to Typhoon Helen , making it the most destructive tropical cyclone to strike Japan in 1972 .